CONSTRUCTION NEWS

PERSONALS, ENGINEERING SOCIETIES, ENGINEERING SCHOOLS, READERS' WANTS, INDUSTRIAL NOTES, PUBLICATIONS.

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PERSONAL.

Mr. Harry F. Lincoln has resigned his position as City Engineer of St. Albans, Vt.

Mr. Charles A. Van Keuren has been reappointed Chief Engineer of the Street and Water Board of Jersey City, N. J.

Mr. John J. Stanley, Superintendent of the Cleveland Electric Ry. Co., of Cleveland, O., is to resign to accept a position as General Manager of the West Shore traction property in New York State.

Mr. Timothy E. Byrnes, of St. Paul, Minn., has been appointed Assistant to Mr. C. S. Mellen, President of the New York, New Haven & Hartford R. R. He was with the Northern Pacific during Mr. Mellen's connection with that road.

Mr. F. R. Puder, Engineer Maintenance of Way of the Evansville & Terre Haute R. R., Evansville & Indianapolis R. R., and Evansville Belt Ry., has resigned to accept service elsewhere, and Mr. F. W. Hawks has been appointed Chief Engineer of the above roads, with headquarters at Evansville, Ind.

Mr. Edward N. Armstrong, Superintendent of the Toledo, Peoria & Western R. R., has been elected President to succeed Mr. H. F. Leonard, resigned. Mr. Armstrong began his railway service in 1867 with the Iowa Central, as a warehouse man. He has been Superintendent of the Toledo, Peoria & Western since 1885.

Mr. Frank Hyndman, Superintendent of Motive Power on the Buffalo, Rochester & Pittsburg, is stated to have resigned that position to become General Master Mechanic of the Consolidated Railroad (N. Y., N. H. & H.), with headquarters in New Haven, Conn. Mr. Hyndman will fill the position made vacant by the resignation some time ago of Mr. F. B. Smith, who was incapacitated by ill health.

Mr. Guy C. Emerson, M. Am. Soc. C. E., who has been nominated by the Republican party for Street Commissioner of Boston, Mass., began his engineering career with the Metropolitan Sewerage Commission as a rodman. In 1895 the Boston Transit Commission placed him in charge of the general inspection of the subway, which was then being constructed, and he remained in this position until it was completed. In 1900 he was appointed Deputy Superintendent of the Boston Sewer Division, and in November of the next year he was appointed Superintendent of Streets, holding the position until Mayor Collins took office.

Col. Frank J. Hecker, of Michigan, has resigned as a member of the Isthmian Canal Commission. In his letter of resignation Col. Hecker stated that a stay of 15 weeks on the Isthmus during the past summer had convinced him that the effect of the climate of the Canal zone was so unfavorable to his health that continued periods of residence there, such as the duties of Commissioner of the Isthmian Canal made desirable, if not imperative, would be at the risk of a general breakdown, both physically and in efficiency of service. Senator Cockrill, of Missouri, is reported to have been offered the vacant Commissionership.

On recommendation of Brig.-Gen. Mackenzie, Chief of Corps of Engineers, the following officers of the Engineering Department, who have been stationed in the Philippines since their graduation from the Military Academy, and who are now on their way to the United States, have been assigned to stations in this country as follows: First Lieuts. Charles T. Leeds, Harold C. Fiske, Ulysses S. Grant, 3d, and Ferdinand Williams, to Washington, D. C., for duty with the 2d Battalion of Engineers at Washington Barracks: First Lieut. Douglas MacArthur, to take station at San Francisco, under the immediate orders of Lieut.-Col. Thomas H. Handbury; and First Lieuts. Max C. Tyler, Julian L. Schley, William H. Rose, and Second Lieuts. Richard C. Moore and Lewis M. Adams, to Fort Leavenworth, Kan., for duty with the 1st Battalion of Engineers.

OBITUARY.

Captain Daniel Meehan, for many years a civil engineer in the employ of the Pennsylvania Canal Co., died of paralysis Nov. 19, at his home in Harrisburg, Pa. He was 64 years old.

C. A. Parker, Second Vice-President of the Cincinnati, Hamilton & Dayton R. R., and Vice-President of the Pere Marquette, in charge of traffic, dropped dead in his office in Cincinnati, O., Nov. 16. He was 49 years old.

William H. Barnes, formerly General Manager of the Boston & Albany R. R., died at his home in Brookline Hills, Mass., Nov. 14, from a complication of diseases. He was connected with the B. & A. R. R. from 1855 to 1903, and at the time of his death was 70 years of age.

Nelson Stow, the inventor of a flexible shaft, now universally used by dentists, died in Binghamton, N. Y., Nov. 20. Mr. Stow built and operated the first street car in Binghamton. He was also interested in Stow Flexible Shaft Co., of Philadelphia, manufacturers of compressed air motors.

Dr. Frank McClean, the engineer and astronomer, died at Brussels, Nov. 8, in his 67th year. He was graduated from Trinity College, Cambridge, in 1859, and followed the profession of engineering until 1870, when he retired, and from that time forward devoted himself in the main to solar and stellar spectroscope work. He was the discoverer of oxygen in the helium class of stars.

Thomas H. Murphy, formerly Superintendent of Construction on the water-works tunnel of Cleveland, O., and a resident of that city, was killed in the Pennsylvania R. R. tunnel in New York City recently. Besides his work on the Cleveland tunnel, Mr. Murphy had built water tunnels at Cincinnati and Chicago, the railroad tunnel under the St. Clair River at Port Huron, Mich., and a water tunnel at Milwaukee. After leaving Cleveland and before taking up his work at New York, he built the water tunnel at Conneaut.

Dr. Thomas M. Drown, M. Am. Inst. Min. E., President of Lehigh University since 1895, died at his home in Bethlehem, Pa., Nov. 16. Dr. Drown was born in Philadelphia in 1842, and was graduated from the University of Pennsylvania in 1862, with the degree of M. D. After practising a short time, he turned his attention to chemistry and metallurgy, and studied at Yale, Harvard, Freiburg and Heidelberg. In 1874 he became Professor of Chemistry at Lafayette College, resigning in 1881 to devote himself to his work as Secretary of the American Institute of Mining Engineers, in the course of which he edited the first eleven volumes of its "Transactions." He became the head of the chemical department of the Massachusetts Institute of Technology in 1885, and four years later was appointed by the Massachusetts State Board of Health, Chemist in charge of the natural waters of the State and methods of purification of water and sewage. In 1897-98 he was President of the American Institute of Mining Engineers.

ENGINEERING SOCIETIES.

COMING MEETINGS.

TECHNICAL SOCIETY OF THE PACIFIC COAST.
Dec. 1 to 3, 1904. Annual meeting at San Francisco, Cal. Secy., O. von Geldern, San Francisco, Cal.

ENGINE BUILDERS' ASSOCIATION OF THE UNITED STATES.
Dec. 2, 3, 1904. Annual meeting at New York, N. Y. Secy., D. Fleming, Harrisburg, Pa.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
Dec. 6 to 9, 1904. Annual meeting at New York City, Secy., F. R. Hutton, 12 West 31st St., New York.

AMERICAN INSTITUTE OF ARCHITECTS.
Dec. 15 to 17, 1904. Annual meeting at Washington, D. C. Secy., Glenn Brown, Washington, D. C.

AMERICAN ECONOMIC ASSOCIATION.
Dec. 28 to 30, 1904. Annual meeting at Chicago, Ill. Secy., F. A. Fetter, Ithaca, N. Y.

AMERICAN FOREST CONGRESS.
Jan. 2 to 6, 1905. At Washington, D. C., under the auspices of the American Forestry Association.

SOCIETY OF CHEMICAL INDUSTRY.—The program for the meeting of Nov. 25, to be held at the Chemists' Club, 108 W. 55th St., New York City, is as follows: "A New Caustic Soda Process" by Mr. H. A. Frasch; "The Determination of Rosin in Shellac," by Mr. A. C. Langmuir; "The Routine Analyses of a Silk Dyehouse," by Mr. G. Mersereau; and "The Use of Tannic Acid as an Aid in Determining Alumina," by Mr. R. B. Divine. Secy., H. Schweitzer, 40 Stone St., New York.

TECHNICAL SOCIETY OF THE PACIFIC COAST.—The fall meeting of the society will be held at San Francisco, Cal., on Thursday, Friday and Saturday, Dec. 1 to 3, 1904. The three sessions of the meeting will be in the Mechanics' Library Building, 31 Post St. The following is the program:

First session, 8 p. m., Dec. 1, reception of members and guests by the president, Mr. Geo. W. Dickie, and an illustrated address by Mr. R. McF. Doble on the subject "Hydro-Electric Power Development and Transmission in California." Second session, 2 p. m., Dec. 2, four papers: "Water Power and Electricity in California," by Mr. Geo. W. Nichols; "Engineering and the Law," by Mr. F. P. Medina; "Trade Schools," by Mr. E. T. Hewitt, and "Phenomena of Machine Operation," by Mr. John Richards. Third session, 2 p. m., Dec. 3, three papers: "Fuel Oils, their Physical Properties," by Mr. P. W. Prutzman, "Durability of Materials of Masonry used in San Francisco," by Mr. Marsden Manson, and "Reclamation of Tidal Areas," by Mr. O. von Geldern.

The meeting closes on Saturday evening, Dec. 3, by a banquet. The meeting is open to all interested, but members of Pacific Coast engineering societies are especially invited to attend. An excursion to Mount Tamalpais may be arranged, in which case one of the two afternoon meetings will be held at the Tavern.

NEW JERSEY SANITARY ASSOCIATION.—The annual meeting of the society, which is the only meeting held during the year, will take place at Lakewood, N. J., on Friday and Saturday, Dec. 9 and 10, 1904. The meeting will convene at the Laurel House at 3.30 p. m., Friday. A second session is scheduled for the evening, at 8, and a third for 9 a. m. Saturday. The papers and subjects for discussion are: "Prevalence and Fatality of Malarial Affections in New Jersey," by Dr. D. E. English, of Millburn, N. J.; "The Etiology of Malaria," by Dr. J. T. Wyckoff, of Leonia, N. J.; "Laboratory Diagnosis of Malaria," by Dr. G. McLaughlin, of Jersey City, N. J.; "The Prevention of Malaria," by Dr. S. E. Armstrong, of Rutherford, N. J.; "Oysters and Clams as Vehicles for the Transmission of Typhoid Fever," by Dr. Edward Guion, of Atlantic City, N. J.; "The Proposed Discharge of the Sewage of the Passaic Valley into New York Bay," by Mr. E. W. Harrison, of Jersey City, N. J., and Mr. G. A. Soper, of New York, N. Y.; "Some Successful Sewage Disposal Works," by Mr. F. Herbert Snow, of Boston, Mass.; "Medical Inspection of Schools," by Dr. Joseph Tomlinson, of Bridgeton, N. J.; "Can An Outbreak of Measles be Controlled," by Dr. T. N. Gray, of East Orange, N. J.; "To What Extent is Isolation Necessary in Communicable Diseases," by Dr. G. K. Dickinson, of Jersey City, N. J.; "Prevention of the Sale of Adulterated Milk," by Dr. J. O. George, of Camden, N. J.

In addition to these papers, there will be committee reports on the following subjects: Civic Sanitary Societies, ch. A. Roeder; Improvement of the Sanitary Service, ch. Dr. J. L. Leal; Publication, ch. Dr. D. C. English. The presidential address, by Mr. M. N. Baker, Associate Editor of Engineering News, will be read at the evening session of Friday, Dec. 9. Its subject is "Municipal Sanitation In Great Britain." Secy., Dr. J. A. Exton, Arlington, N. J.

AMERICAN ECONOMIC ASSOCIATION.—The activity of this society extends to subjects which directly concern the work of the engineer, broadly considered. Such subjects as Railway Rates, or Corporation Control, are of interest to a large number of men engaged in engineering work. On this account we give the following outline of the program of the coming meeting of the Association.

The meeting is to be held at Chicago, Ill., on Dec. 28 to 30, 1904; six of the seven sessions will take place in rooms of the University of Chicago, while the last session is located at Northwestern University, Evanston, Ill. The program, time and location of each session is as follows:

First session, 10 a. m., Dec. 28, Joint Session with American Political Science Association and American Historical Association; at Leon Mandel Assembly Hall, University of Chicago, addresses by Prof. W. R. Harper and Prof. F. J. Goodnow. Second session, 8 p. m., Dec. 28, Joint session with the same two societies, at the Chicago Historical Society; addresses by Prof. F. W. Taussig and Prof. Goldwin Smith. Third session, 10 a. m., Dec. 29, at Leon Mandel Assembly Hall; discussion of The Theory of Money by Professors J. L. McLaughlin, David Kinley, A. P. Andrew, Wm. A. Scott and F. M. Taylor. Fourth session, 2.30 p. m., Dec. 29, at Leon Mandel Assembly Hall; discussion of Open Shop or Closed Shop, by Professors J. R. Commons, J. G. Brooks, E. A. Ross, G. E. Barnett and H. R. Seager, and Messrs. John Hibbard, Thos. Kidd, and T. K. Webster. Fifth session, 10 a. m., Dec. 30, at Reynolds Club, Joint session with American Political Science Association; discussion of Corporations and Railways, by Professors J. H. Gray, H. C. Adams, and C. C. Plehn, and Messrs. E.

B. Whitney, M. A. Knapp, E. P. Ripley, and W. W. Baldwin. Sixth session, 2.30 p. m., Dec. 30, at Reynolds Club; discussion of Preferential Tariffs and Reciprocity, by Professors Adam Shortt, A. W. Flux, H. P. Willis, and G. M. Fisk, and Mr. G. E. Foster. Seventh session, 8 p. m., Dec. 30, at Northwestern University Building; discussion of Economic History, by Professors E. F. Gay, C. D. Wright, J. B. McMaster, C. H. Hull, J. H. Hollander and H. R. Seager.

WESTERN SOCIETY OF ENGINEERS.—A very pleasant trip was made to the St. Louis Exhibition and the new cantilever bridge over the Mississippi River, at Thebes, Ill., on Nov. 17 to 20. A party of about 90 members and guests, filling three special sleeping cars, left Chicago at 9.27 p. m., Nov. 17, the cars being attached to the regular train of the Illinois Central Ry. Arriving at St. Louis, Nov. 18, breakfast was served at the Union Station, and special electric cars were provided to carry the party to the Exhibition, where the members separated, being left to their own resources for the day. The party reassembled at the station in the evening, and the cars, with two other cars occupied by members and guests of the St. Louis Engineers Club, were attached to the 9.15 train of the St. Louis Southwestern Ry., and were cut off at Thebes during the night.

At 8 a. m., Nov. 19, breakfast was served at the camp of the Kelly-Atkinson Construction Co., contractors for the erection of the cantilever bridge. A train of flat cars was then provided, to take the party up to the new railway and thence out to the end of the completed work on the east side, the design of the structure being explained by Mr. Ralph Modjeski, M. Am. Soc. C. E., the Chief Engineer. The train then returned to the river bank, and the party boarded a steamboat and barge for transfer across the river to inspect the western end of the bridge and its approaches, including the site for extensive freight sorting yards, as the bridge will be used by several railways, with considerable interchange of cars. After the ferry transfer back to Thebes, the party was again entertained at luncheon at the camp, and then left at 1.30 p. m., the cars being attached to the regular train of the St. Louis, Iron Mountain & Southern Ry. At East St. Louis, the three Chicago cars were detached and run over the new belt line of the Terminal Railway Association directly to the Exhibition, being stored on one of the Wabash Ry. special sidings, provided for such purposes. A farewell visit to the Exhibition closed the day.

At 7.30 a. m., Nov. 20, the cars were taken to the Union Station, and attached to the 9.30 train of the Chicago & Eastern Illinois Ry., giving an opportunity to inspect this road's new Chicago and St. Louis line, information in regard to which was furnished by Mr. W. S. Dawley, M. Am. Soc. C. E., Engineer of Maintenance of Way. Special arrangements were made to enable the dining car to accommodate the large number of extra passengers, and the train reached Chicago at 5.50, closing a very enjoyable and successful excursion.

CIVIL SERVICE EXAMINATIONS FOR TECHNICAL POSITIONS.

Announcement is made in these columns from time to time of civil service examinations for technical positions. In all cases where the examinations are held by the United States Civil Service Commission, further information may be obtained by addressing the Secretary of that board at Washington, D. C.

IRRIGATION ENGINEER.—U. S. Civil Service Commission has postponed until Jan. 18-19 the examination which was to be held Nov. 22-23, to secure eligibles to fill vacancies as they may occur in the position of irrigation engineer in connection with the irrigation and drainage investigations in the Office of Experiment Stations, Department of Agriculture. The initial salary for the position will be from $1,500 to $2,000 per annum, according to qualifications.

CIVIL ENGINEER STUDENT.—U. S. Civil Service Commission will hold an examination Jan. 4-5 at various places throughout the country to fill at least three vacancies in the position of civil engineer student in the Department of Agriculture, at not exceeding $50 per month, and similar vacancies as they may occur in that department. The object of the examination is to qualify young engineer students for a one-year graduate course in highway engineering. Six months will be devoted to laboratory work and study, and six months to practical road building in the field.

HEALTH OFFICERS AND SANITARY INSPECTORS.—The Board of Examiners for Health Officers and Sanitary Inspectors in the State of New Jersey will hold a semi-annual examination at the State House, Trenton, on Dec. 7, 1904. This will be the second examination under the recent legislative act providing that after Jan. 1, 1905, no local board of health in the state shall appoint any person as a health officer or as a sanitary inspector who does not hold a license from the State Board of Health certifying that he has passed an examination that qualifies him for such position. The examiners named are appointed by and report to the State Board of Health. Under the law four classes of licenses are granted; for health officers, eligible to appointment for executive positions by any local board of health in the state, and sanitary inspectors of the first, second and third classes. Sanitary inspectors who hold licenses of the first class may be appointed by any local board of health in the state. Holders of second class licenses may be appointed to office in any municipality not a city. Holders of third class licenses are eligible for appointment in townships only. Some of the most progressive health boards in New Jersey are now employing sanitary engineers, chemists or biologists, as health inspectors, and there bids fair to be similar openings for a number of others within a short time. Application blanks and information on the nature of the examinations may be obtained from Dr. A. Clark Hunt, Secretary of the Board of Examiners, care of the State Board of Health, Trenton, N. J.

CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.), may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close	Work.	Place.	On file.	See issue.
Nov.				
25	Water-works mat'rl.	Wash., D. C.	S.	11-10
29	Bridge.	Cortlandt, N. Y.	P. & S.	11-10
*29	Tunnel.	Boston, Mass.	P. & S.	10- 3
30	Earth spreaders.	Wash., D. C.	B. S.	11-24
30	Unloading machines.	Wash., D. C.	B. S.	11-24
Dec.				
*1	Bridge.	Manila, P. I.	P., S. & B. S.	7-28
*1	Light-house.	Tompkinsville, N. Y.	P., S. & B. S.	11- 3
*1	Sewers.	St. Joseph, Mo.	P., S. & B. S.	11-10
*7	Water-works.	Aberdeen, Miss.	S.	11-24
*12	Monuments.	Wilmington, N. C.	P. & S.	11-17
*15	Water-works.	Santiago de Cuba.	P. & S.	11-17
*15	Water supply.	Cuba.	P. & S.	11-17
*20	Dam and lock.	Boston, Mass.	P. & S.	11-17

*Work advertised in Engineering News.

NOTE.—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close. Work. Place. See issue.

LIGHT, HEAT AND POWER PLANTS.

Nov. 25. City lighting, Minneapolis, Minn. ....Nov. 17
Nov. 25. Gasoline lamps, Minneapolis, Minn. ....Nov. 17
Nov. 26. City lighting, San Antonio, Tex. ....Nov. 10
Nov. 26. Street lighting, Evansville, Ind. ....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Dec. 1. City lighting, Newport, Ky. ....Nov. 17
Dec. 1. Power house sale, Chambersburg, Pa. ....Nov. 17
Dec. 1. Electric plant, Spring Lake, Mich. ....Nov. 24
Dec. 1. Gasholder foundations, Richmond, Va. ....Nov. 24
Dec. 6. Electric lights, plant, etc., Dallas, Tex. ....Oct. 27
Advertised, Eng. News, Oct. 27 and Nov. 3.

BRIDGES.

Nov. 25. Bridge, superstructure, Cincinnati, O. ....Nov. 3
Nov. 25. Bridge, Spokane, Wash. ....Nov. 17
Nov. 25. Bridge abutments, Indianapolis, Ind. ....Nov. 24
Nov. 28. Bridge, Fredericton, N. B. ....Nov. 17
Nov. 29. Bridge, superstructure, Cortlandt, N. Y. ....Nov. 10
Nov. 29. Bridge, steel, Pekin, Ill. ....Nov. 24
Nov. 29. Bridge, Mandan, N. Dak. ....Nov. 24
Nov. 29. Bridge, Spartanburg, S. C. ....Nov. 24
Nov. 30. Bridge, Spartanburg, S. C. ....Nov. 24
Nov. 30. Bridge, Akron, O. ....Nov. 17
Dec. 1. Bridge superstructure, Manila, P. I. ....July 28
Advertised, Eng. News, July 28 to Dec. 1.
Dec. 1. Bridge, Stockton, Cal. ....Nov. 24
Dec. 1. Bridges, Muskogee, Ind. T. ....Nov. 24
Dec. 2. Bridge, Chicago, Ill. ....Nov. 24
Dec. 3. Bridge, Moscow, Idaho ....Nov. 17
Dec. 5. Bridge, Dillon, Mont. ....Oct. 20
Dec. 7. Bridges, Eau Claire, Wis. ....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Dec. 14. Bridges, Belgium ....Nov. 10

BUILDINGS.

Nov. 25. School, Chicago, Ill. ....Nov. 24
Nov. 26. Court house, Hartsville, Tenn. ....Nov. 24
Nov. 26. Building, Lincoln, Neb. ....Nov. 17
Nov. 26. Gas Fixtures, Chattanooga, Tenn. ....Nov. 17
Advertised, Eng. News, Nov. 17 and 24.
Nov. 28. Sanitary work, New York, N. Y. ....Nov. 17
Nov. 28. Ventilating, etc., New York, N. Y. ....Nov. 17
Nov. 28. Railway station, Moncton, N. B. ....Nov. 24
Nov. 29. Heating, repairs, etc., Buffalo, N. Y. ....Nov. 24
Nov. 29. Engine house, etc., New York, N. Y. ....Nov. 17
Nov. 29. Repair shop, Ft. Totten, N. Y. ....Nov. 3
Advertised, Eng. News, Nov. 3 to 24.
Nov. 30. Post office, Anderson, Ind. ....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Nov. 30. School plans, Pasadena, Cal. ....Nov. 10
Nov. 30. Barracks, Walla Walla, Wash. ....Nov. 17
Nov. 30. Barracks, etc., New Orleans, La. ....Nov. 17
Dec. 1. Light-house, Tompkinsville, N. Y. ....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Dec. 2. Fair buildings, Columbus, O. ....Nov. 10
Dec. 3. Hall, etc., Delaware, O. ....Nov. 17
Dec. 5. Buildings, etc., Nashville, Tenn. ....Nov. 24
Dec. 5. Court house, Tillamook, Ore. ....Nov. 24
Dec. 8. Elevator, Salt Lake City, Utah ....Nov. 24
Dec. 8. Steam power, etc., New York, N. Y. ....Nov. 17
Dec. 10. Church, Chicago, Ill. ....Nov. 17
Dec. 10. Railway station, Mobile, Ala. ....Nov. 10
Dec. 12. Court house, Providence, R. I. ....Nov. 3
Dec. 12. Shed, Stockton, Cal. ....Nov. 24
Dec. 13. Elevator, Portland, Ore. ....Nov. 24
Dec. 13. Steam heating, Portland, Ore. ....Nov. 17
Dec. 14. Electric work, Cheyenne, Wyo. ....Nov. 17
Advertised, Eng. News, Nov. 17 to Dec. 8.
Dec. 14. Buildings, Cheyenne, Wyo. ....Nov. 17
Advertised, Eng. News, Nov. 17 to Dec. 8.
Dec. 14. Post office, Biloxi, Miss. ....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Dec. 15. Post office, Norristown, Pa. ....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Dec. 15. Several buildings, Port Townsend, Wash. ....Nov. 24
Dec. 16. Crib superstructure, Chicago, Ill. ....Nov. 24
Dec. 17. Library, Denver, Colo. ....Nov. 3
Dec. 17. Court house, Camden, S. C. ....Nov. 24
Dec. 20. Steam heating, Harrison, Ark. ....Nov. 17
Advertised, Eng. News, Nov. 17 and 24.
Dec. 21. Wagon shed, etc., Oswego, N. Y. ....Nov. 24
Advertised, Eng. News, Nov. 24 to Dec. 15.
Dec. 21. Post office, Gainesville, Fla. ....Nov. 24
Advertised, Eng. News, Nov. 24 to Dec. 1.
Dec. 29. Post office, Vincennes, Ind. ....
Dec. 29. Hotel, Victoria, B. C. ....
Jan. 3. Court house, Wheeling, W. Va. ....

WATER SUPPLY AND IRRIGATION.

Nov. 25. Water-works, Stewartstown, Pa. ....
Advertised, Eng. News, Nov. 10 and 17.
Nov. 25. Water-works material, Washington, D. C. ....
Nov. 29. Pumping engine, Milwaukee, Wis. ....
Nov. 29. Well, Fort McPherson, Ga. ....
Nov. 30. Hydrants, New York, N. Y. ....
Dec. 1. Air compressor, Washington, Ia. ....
Dec. 1. Boilers, Chicago, Ill. ....
Dec. 2. Pump, San Francisco, Cal. ....
Dec. 5. Gate valves, etc., Montgomery, Ala. ....
Advertised, Eng. News, Nov. 24.
Dec. 5. Artesian well, North Yakima, Wash. ....
Dec. 6. Laying water mains, etc., New York, N. Y. ....
Dec. 7. Water-works, Carrollton, Ga. ....
Advertised, Eng. News, Nov. 17 to Dec. 8.
Dec. 7. Water-works, Aberdeen, Miss. ....
Advertised, Eng. News, Nov. 10 and 24.
Dec. 15. Water supply, Cuba ....
Advertised, Eng. News, Nov. 17 to Dec. 8.
Dec. 15. Irrigation ditches, etc., Hazen, Nev. ....
Advertised, Eng. News, Nov. 24 to Dec. 15.
Dec. 15. Water-works, Jefferson, Tex. ....
Advertised, Eng. News, Nov. 24.
Dec. 17. Water-works, Marion, N. C. ....
Advertised, Eng. News, Nov. 10 and 17.
Dec. 19. Water-works, Holland, Minn. ....
Dec. 19. Pumping engine, etc., Canton, O. ....
Advertised, Eng. News, Nov. 24 and Dec. 1.
Dec. 20. Pipe, Toronto, Ont. ....
Advertised, Eng. News, Nov. 3 and 10.
Dec. 21. Pumps, boilers, engines, England ....
Jan. 9. Outlet tunnel, Washington, D. C. ....
Advertised, Eng. News, Nov. 24 to Jan. 5.
No date. Water pipe, Raton, N. Mex. ....
Advertised, Eng. News, Nov. 17.

SEWERAGE.

Nov. 25. Sewer, Le Sueur, Minn. ....Nov. 17
Nov. 26. Sewer, Dixon, Ill. ....Nov. 17
Nov. 28. Septic tanks, Santa Cruz, Cal. ....Nov. 24
Nov. 30. School, Boston, Mass. ....Nov. 24
Dec. 1. Sewers, Havre de Grace, Md. ....Nov. 3
Advertised Eng. News, Nov. 3 to 17.
Dec. 1. Sewers, St. Joseph, Mo. ....Nov. 10
Advertised, Eng. News, Nov. 10 and 17.
Dec. 2. Sewers, Omaha, Neb. ....Oct. 13
Dec. 2. Sewers, Dayton, O. ....Nov. 24
Dec. 2. Sewer, Hamilton, O. ....Nov. 24
Dec. 6. Sewer, Arkansas City, Kan. ....Nov. 24
Dec. 6. Sewers, Los Angeles, Cal. ....Nov. 10
Dec. 7. City hall, Sonoma, Cal. ....Nov. 24
Dec. 7. Sewers, New York, N. Y. ....Nov. 24
Dec. 15. Sewers, Pine Bluff, Ark. ....Nov. 24
Dec. 20. Sewer system, West Orange, N. J. ....Nov. 24
Advertised, Eng. News, Nov. 24 to Dec. 15.
Jan. 31. Sewers, water pipe, etc., New Orleans, La. ....Nov. 24
Advertised, Eng. News, Nov. 24 to Jan. 19.

STREETS AND ROADS.

Nov. 25. Paving, Philadelphia, Pa. ....Nov. 24
Nov. 26. Macadamizing, Cincinnati, O. ....Nov. 10
Nov. 28. Road, Harrisburg, Pa. ....Nov. 3
Nov. 28. Grading, New Castle, Pa. ....Nov. 24
Nov. 28. Grading, etc., Indianapolis, Ind. ....Nov. 24
Dec. 1. Sidewalks, Ashland, O. ....Nov. 24
Dec. 1. Sidewalks, Keokuk, Ia. ....Nov. 3
Dec. 2. Sidewalks, etc., Hamilton, O. ....Nov. 24
Dec. 3. Road, Harrisburg, Pa. ....Nov. 24
Dec. 5. Road, Brownstown, Ind. ....Nov. 24
Dec. 6. Paving, etc., Henderson, Ky. ....Nov. 24
Dec. 7. Sidewalks, Vancouver Barracks, Wash. ....Nov. 24
Dec. 19. Paving, vitrified brick, Webb City, Mo. ....Nov. 17

MISCELLANEOUS CONTRACTS.

Nov. 25. Trench pumps, Washington, D. C. ....Nov. 17
Nov. 25. Fish hatchery, Gloucester, Mass. ....Nov. 17
Nov. 25. Nails and lanterns, New York, N. Y. ....Nov. 24
Nov. 26. Steel vessel, Detroit, Mich. ....Oct. 20
Nov. 26. Retaining wall, tile drain, Bowdre, Ill. ....Nov. 17
Nov. 27. Filling, Columbus, O. ....Nov. 17
Nov. 28. Wharf, bridge, Fredericton, N. B. ....Nov. 10
Nov. 28. Ditch, Chaska, Minn. ....Nov. 17
Nov. 29. Naval supplies, Washington, D. C. ....Nov. 17
Nov. 29. Ditches, Glencoe, Minn. ....Nov. 17
Nov. 29. Repair shops, Ft Totten, N. Y. ....Nov. 10
Nov. 29. Boiler plant, etc., West Point, N. Y. ....Nov. 10
Advertised, Eng. News, Nov. 10 and 17.
Nov. 29. Ditch, Marion, Ind. ....Nov. 24
Nov. 29. Surf boats, Washington, D. C. ....Nov. 24
Nov. 29. Dredging, New York, N. Y. ....Nov. 24
Nov. 29. Ditch, Monticello, Ind. ....Nov. 24
Nov. 30. Dredging, New York, N. Y. ....Nov. 24
Nov. 30. Earth spreaders, Washington, D. C. ....Nov. 24
Nov. 30. Unloading machs. & plows, Wash., D. C. ....Nov. 24
Nov. 30. Timber, drainage, New Orleans, La. ....Sept. 29
Advertised, Eng. News, Sept. 29 to Dec. 1.
Dec. 1. Railway, Somerset Ry. ....Nov. 3
Advertised, Eng. News, Nov. 3 to 24.
Dec. 1. Bulkhead, Buffalo, N. Y. ....Nov. 10
Dec. 1. Dredge work, Kenton, O. ....Nov. 24
Dec. 1. Riprap, Boston, Mass. ....Nov. 24
Dec. 3. Coal handling plant, New Orleans, La. ....Oct. 20
Dec. 6. Naval supplies Washington, D. C. ....Nov. 24
Dac. 7. Crematory, Portland, Me. ....Nov. 17
Dec. 8. Dredging, San Francisco, Cal. ....Nov. 17
Dec. 8. Electric elevator, Washington, D. C. ....Nov. 17
Advertised, Eng. News, Nov. 17 and 24.
Dec. 12. Monuments, Wilmington, N. C. ....Nov. 17
Advertised, Eng. News, Nov. 17 to Dec. 8.
Dec. 13. Machine tools, Washington, D. C. ....Nov. 17
Dec. 13. Electric elevator, Washington, D. C. ....Nov. 17
Dec. 14. Hydraulic lift lock, Kirkfield, Ont. ....Nov. 10
Dec. 15. Battleship, Washington, D. C. ....Sept. 29
Dec. 15. Canal improvement, Albany, N. Y. ....Nov. 24
Advertised, Eng. News, Nov. 24 to Dec. 22.
Dec. 15. Boiler house extension, etc., N. York, N. Y. ....Nov. 24
Dec. 16. Coaling wharf, Savannah, Ga. ....Nov. 24
Dec. 16. Crib superstructure, Chicago, Ill. ....Nov. 17
Dec. 16. Window and door screens, Prescott, Ariz. ....Nov. 17
Advertised, Eng. News, Nov. 17 to Dec. 15.
Dec. 16. Wire screens, Washington, D. C. ....Nov. 24
Dec. 17. Lumber, Washington, D. C. ....Nov. 24
Dec. 20. Compressor, Washington, D. C. ....Nov. 17
Dec. 20. Dam and lock, Boston, Mass. ....Nov. 17
Advertised, Eng. News, Nov. 10 to Dec. 8.
Dec. 25. Coal unloading apparatus, Belgium ....Oct. 20
Dec. 27. Cranes, etc., South Africa ....Nov. 10
Dec. 27. Drafting materials, etc., Wash., D. C. ....Nov. 24
Dec. 28. Telephone material, Australia ....Nov. 24
Dec. 28. Telegraph material, etc., Australia ....Nov. 17
Dec. 31. Portland cement, Washington, D. C. ....Nov. 24
Jan. 5. Fuel oil, etc., Phoenix, Ariz. ....Nov. 24
Advertised, Eng. News, Nov. 24 to Jan. 4.
Mar. 31. Electric railway, China ....Oct. 20
Advertised, Eng. News, Oct. 20 to Dec. 29.
Apr. 1. Dredging, Sweden ....Nov. 24
No date. Quarry stripping, McDermott, O. ....Nov. 24
Advertised, Eng. News, Nov. 24.

RAILWAYS.

ATCHISON, TOPEKA & SANTA FE.—R. B. Burns, Ch. Engr., at Los Angeles, Cal., writes us that nothing has been done regarding construction of line from Stockton, Cal., to Eureka, via Sacramento, Cal. No work will be done on this line at present. It is also probable that no work will be attempted next year.

AUGUSTA & ELBERTON.—Engineers are said to be completing surveys for this proposed road that will run from Augusta to Elberton, Ga. The company was chartered last spring with $100,000 capital. C. B. Young and Fred. T. Lockhart, Augusta, Ga., are interested. Contracts will be let soon.

BEAUMONT, SOUR LAKE & WESTERN.—This company will run surveys about Jan. 1 for proposed 125-mile extension. Construction probably will begin in early spring. G. W. Meeker, Beaumont, Tex., is Pres. and Gen. Mgr. G. W. White, Beaumont, is Ch. Engr.

BINGHAMPTON & SOUTHWESTERN.—The contract for building this road, we are informed, was awarded to the Colonial Construction Co., 141 Broadway, New York. Sub-contracts are being let now from Binghampton, N. Y., office of the contractors. This road will open up new anthracite coal fields, and afford an outlet north and west for mines now in operation. It will connect with the Delaware & Hudson, Erie, and Delaware, Lackawanna & Hudson railways at Binghampton, and with the Pennsylvania and New York Central at Williamsport, Pa. W. P. Chapman is Gen. Mgr. Construction Co.

COLUMBUS, MARSHALL & NORTHEASTERN.—A Marshall, Mich., report states that construction of this road from Montpelier, O., through Coldwater, Union City, Tekorisha, Marshall, Olivet and Lansing to Bay City is assured. Road was graded two years ago. H. E. Holton, Pres. of the C., M. & N. E., is said to have contracted with L. M. Shute, of firm of Shute & Arnold, for general construction of the line.

GULF, MENTZ & LAKE CHARLES.—Branch line of this road will be run to Orange, Tex., when route is surveyed, E. B. Mentz, of Beaumont, Tex., is quoted as saying. Docks and yards probably would be located at Sabine Pass, Tex. Isadore Newman, of New Orleans, La., and Burkett & Barnes, Houston, may be interested.

LONG ISLAND RY.—Plans for terminals have been filed with Martin W. Littleton, Pres. Boro. Brooklyn, New York. They will be located on First Ave., between 63d and 66th Sts., and 63d and 64th Sts., between Second Ave. and New York Bay.

LOUISIANA RY. & NAVIGATION CO.—New route is said to have been surveyed between Etholen (Sierra Blanca Post Office) and Fabens (Clint Post Office), Tex. W. E. Hawley, Shreeveport, La., is Ch. Engr.

MOBILE & WESTERN ALABAMA.—J. A. Montgomery, Ch. Engr., 1021 First National Bank Bldg., Birmingham, writes us that 340 miles of this line have been located, and that 130 miles are under survey; 150 miles of right-of-way have been secured. The entire contract has been let to Terry & Gahagan Construction Co., 79 Wall St., New York; also offices in First National Bank Bldg., Birmingham. Ed. F. Terry is Pres., and W. A. Gahagan First Vice-Pres.; J. A. Montgomery, Second Vice-Pres., and W. B. Bush, Secy. The line will extend from Mobile to Birmingham, and thence to Tennessee River. Surveys are now being completed. H. Austill is Pres., at Mobile, Ala.

MONTEREY & DENVER AIR LINE.—The Monterey, Cal., "New Era" states that F. E. Pettengill, of New York, the promoter of this railway, has a promised backing of $350,000,000 for construction purposes. The line will run from Denver, Colo., to Monterey, and thence via Santa Cruz to San Francisco; a branch would be built also to San Jose. A 1,600-ft. pier is planned. A steel corporation, owning 60,000 acres of iron ore land, is said to contemplate erecting a steel plant 200 miles east of Marysville, Utah, that would ship 3,000 tons of steel a day.

PRINCE EDWARD ISLAND RY.—D. Pottinger, Gen. Mgr., informs us that contract for branch line from Cardigan to Montague Bridge, P. E. I., was awarded to Willard Kitchen, Murray River, P. E. I.

RAILWAY MILEAGE.—Advance sheets of Poor's Manual of Railroads show the total steam railway mileage of the United States at the end of 1903 was 207,604 miles, an increase of 4,505 miles during the year. In the Southwestern States 1,804 miles were built, 683 miles in the Northwestern States, 602 miles in the Gulf and Mississippi Valley States, 562 miles in the Pacific coast States, 486 miles in the central Northern States, 348 miles in the middle States, and only 12 miles in New England.

ST. LOUIS SOUTHWESTERN.—M. L. Lynch, Ch. Engr., has stated that surveys will be made for further extensions. As previously noted, this company has filed an application with the Railroad Commission of Texas for authority to issue bonds on its extension from Lufkin, southeast, 26 miles, to amount of $600,000; 22 miles of this line was the former Texas & Louisiana Ry., and 4 miles have recently been constructed. It is the intention of the company to shortly extend its line southeast to the Sabine River and south to either Orange or Beaumont. Mr. Lynch may be addressed at Tyler, Tex.

YAZOO & MISSISSIPPI.—An extension of this line has been authorized, according to A. S. Baldwin, Engr. of Construction, Illinois Central Ry., from Mattson to Roundway, Miss. Bids for this work probably are being received. J. D. Hayden will have charge of construction. Mr. Baldwin may be addressed at Chicago.

NEW INCORPORATIONS AND CHARTERS,

CEDAR RAPIDS, WATERLOO & NORTHERN IOWA.—Incorporated with capital of $100,000 to build a railroad from Cedar Rapids, Iowa, in a northwesterly direction to Waterloo, 50 miles. L. M. Rupert is Pres.; T. A. Berkebile, Vice-Pres., and E. A. Crocker, Secy.; all of Cedar Rapids, Ia.

COLORADO, WYOMING & IDAHO.—Wyo.—Chartered to build a standard-gage railway from Denver, Colo., to Boise, Idaho. Capital, $10,000,000. John D. Mitchell, of Kansas City, is Attorney for the company. A preliminary survey has been run. Contracts probably will be let soon. Estimated length of road is 825 miles, of which 325 will be in Wyoming.

DELAWARE & EASTERN.—N. Y.—Company has been incorporated, with a capital of $600,000, to operate a steam railroad between East Branch and Arkville, with a branch to Andes, about 43 miles, in Delaware County. Among the directors are Edward Kelly, of Wharton, N. J., and H. A. V. Post, Russell Murray and George A. Lee, of New York.

DENVER, WICHITA & MEMPHIS.—Okla.—With capital of $1,000,000, this company has been chartered to build a line 1,800 miles long from Denver, Colo., through Kansas, Oklahoma, Indian Territory and Arkansas into Tennessee at an estimated cost of $54,000,000. Among the incorporators are S. P. Brundage, of St. Louis, Mo., and F. W. Casner and M. Harrington, of Kansas City, Mo.; F. E. Sutton and A. M. Coffman, of Oklahoma City, Okla.; Wm. B. Williams, of Carmen, Okla., and E. G. Wilson and J. M. Grouth, of Catoosa, Ind. T. It is also proposed to build a tramway 10 miles long east from Catoosa, Ind. T.

ILLINOIS & MISSOURI.—Ill.—Incorporated to build a railroad from Quincy in southerly line through Melrose and Fall Creek to East Hannibal. Capital stock, $10,000. Incorporators: A. E. Achenbach, South Bend, Ind.; Fred Marlin, Chicago; E. H. Osborn, Duke Schroer and Lyman McCarl, Quincy, Ill. Headquarters will be at Quincy, Ill.

JASPER & EASTERN.—Tex.—The charter of the Jasper & Eastern Railway Co. has been filed. It provides for the construction of a railroad from Kirbyville, Tex., a station on the Gulf, Beaumont & Kansas City Ry., north of Beaumont, northeast to the Sabine River, 17 miles, thence via DeRidder, La., to Alexandria, La., 83 miles, a total of 100 miles. This railroad will cover the finest region of long-leaf yellow pine in Louisiana and Texas. Branch lines aggregating some 25 miles in length and projected from the main line to several important lumber mills. Capital stock, $200,000. Principal office, Kirbyville, Tex. Incorporators are W. C. Nixon, of Galveston, Gen. Mgr. of Gulf, Colorado & Santa Fe Ry.; J. W. Torry, J. P. Jones, O. L. Clark, F. G. Pettibone, A. C. Torbett, J. E. Baxter, T. J. Lee, C. F. W. Felt, John Sealy and George Sealy, all of Galveston; and E. P. Ripley, of Chicago, Pres. of the Santa Fe system.

JEFFERSON & ATHENS.—Ga.—This company has been chartered with a capital stock of $50,000. It will be 18 miles long and will run between Jefferson and Athens, Ga.

NORTHERN MAINE SEABOARD.—Me.—Charter will be granted. Survey will be begun at once under direction of M. Burpee, Ch. Engr., Houlton, Me. It will be built from Lagrange, on the Bangor & Aroostook Ry., to Stockton Springs and Searsport, via Bradford, Hudson, Levant, Glenburn, Hermon, Hampden, Winterport, Frankfort and Prospect; about 60 miles long. $100,000 has been expended for terminal sites at Stockton Springs and Searsport. F. W. Cram, Bangor, Me., Pres. Bangor & Aroostook Ry., is Pres. of this new company, which is understood to be controlled by the B. & A.

SUMTER & NORTHERN.—S. C.—A charter has been granted this company to build a line from Sumter via Bishopville to McBee, on the Seaboard Air Line. Incorporators: R. E. Carnes, W. R. Scarborough and J. Ed. Stucky, of Sumter, S. C. Railway will be 41 miles long.

STREET AND ELECTRIC RAILWAYS.

BRIGHTON, N. Y.—The Village Board has granted a franchise to Rochester, Syracuse & Eastern R. R. Co. permitting it to build an electric street railway through the village from Henrietta town line west to city line.

SYRACUSE, N. Y.—The Auburn & Syracuse Electric Railroad Co. has decided to expend $100,000 in double-tracking five miles of its road west of the city limits and in the purchase of new cars and other equipment. The work will be done in connection with the establishment of a park and summer resort on the highlands. Contract for new cars has been placed with the St. Louis Car Co. A. G. Davids, Auburn, is Supt.

SYRACUSE, N. Y.—The Syracuse & Suburban Electric Ry. Co. will extend its tracks 500 ft. into the village of Jamesville and build a terminal station there. Jamesville Village Board has decided to widen roadway so as to allow the extension. The new station will be 15 × 25 ft.

CAMPBELL, N. Y.—E. E. Schutt, of Rochester, has been granted a franchise for construction of an electric railway through Campbell.

MILFORD, N. Y.—A committee composed of S. W. Barnum, of Cherry Valley; Bertrand Roberts, of Rosebloom; Chas. Eckler, of Middlefield, and John Wilcox, of Milford, is considering the advisability of building an electric railway between Cherry Valley and Milford.

ATLANTIC CITY, N. J.—The Atlantic Construction Co. has the contract for building an electric railway, 22 miles long, in Atlantic City. Those wishing to submit prices for different materials may communicate with William B. Dixey, Pres. and Gen. Mgr., 21 New Hampshire Ave., City.

CAMDEN, N. J.—A survey has been completed for the proposed extension of Almonesson branch of Camden, Gloucester & Woodbury trolley road to Blackwood, and from Mantua to Mullica Hill. Work on these extensions will be commenced the coming winter.

JERSEY CITY, N. J.—The Street and Water Board has decided to pass over Mayor Fagan's veto the ordinance granting Public Service Corporation permission to lay tracks in Monticello Ave. from Communipaw Ave. to Harrison Ave., so that the belt line may be connected with Jackson Ave. line. D. F. Carver, 29 Exchange Place, City, is Ch. Engr.

BANGOR, PA.—The Northampton & Monroe County Street Ry. Co., care of R. F. Schaeffer, City, has had specifications completed and are about ready for bids for 15 miles of road from Bangor to Stroudsburg. A power house will be erected.

DANVILLE, PA.—E. R. Sponsler, Secy. Columbia & Montour Electric Ry. Co., states that the company will soon extend its lines to North Berwick, and that it will eventually extend to Nescopeck.

ALLENTOWN, PA.—City Council has received a favorable report on the request of Allentown & Reading Traction Co. for a franchise for a belt line. The company offers the city $15,000 for franchise.

UNIONTOWN, PA.—The trolley line from Mount Pleasant to Latrobe via Pleasant, Unity and other towns, has secured a charter. A power plant will be built at Mount Pleasant.

BOYERTOWN, PA.—The Boyertown & Palm Street Ry. Co. has decided to at once build that part of road beginning at end of Oley Valley line, in Boyertown, over and upon Reading Ave., to New Berlinville. This part of the road will be about 1½ miles in length. The contract is about to be given out, and some of the material has already been ordered. Work is to commence at an early date. Contract for other part of line will be let later. Thomas J. B. Rhoards is Pres.

BREENVILLE, PA.—Plans are being laid for the building of an electric railway line from Cleveland to Meadville, Pa. The line will be known as Cleveland, Geneva & Meadville Electric Railway. A New York trust company is said to be back of the project, and it is stated that the road and equipment will cost $1,250,000. The proposed route is from Geneva to Austinburg, Jefferson, O., to Denmark, Gould, and Pierpont, in Ashtabula County, Ohio, and from latter place to Meadville, via Penn Line, Linesville, and Conneaut Lake. Greenville people are interested in line, as it assures the building of Greenville-Sharpsville and Greenville-Conneaut Lake lines.

CLEVELAND, O.—It is said that a 96-mile third-rail electric line will shortly be constructed connecting Cleveland, Ravenna, Congress Lake, Canton Zoar and Canal Dover. J. V. Ward, City, is interested.

YOUNGSTOWN, O.—The Mahoning Valley Ry. Co. will extend its lines to Idora Park. M. C. McCaskey is Gen. Mgr.

ANDERSON, IND.—The Indianapolis & New Castle Traction Co. has asked County Commissioners that a franchise be granted the company through Anderson and Adams townships. The road will follow Big Four as nearly as possible to Indianapolis Belt R. R., and will enter Indianapolis on Massachusetts Ave. The franchise will probably be granted through the county.

BAY CITY, MICH.—The Detroit & Bay City Traction Co. has purchased 20 acres of land near this city, to be used for terminal purposes.

HILLSBORO, ILL.—We are informed that all bids received Nov. 14 for constructing an electric street railway here for Hillsboro Electric Ry. Co. were rejected. New bids will probably be called for in the near future. Ed. A. Cress is Secy.

QUINCY, ILL.—Fred. Norlin, Engr., 711 Chicago Opera House Block, Chicago, is making a preliminary survey for an interurban railway from Hannibal, Mo., to Quincy.

KENOSHA, WIS.—A company is being formed to build a new electric railway line between Kenosha and Lake Geneva for freight and passengers, work to begin early in the spring. Kenosha and Chicago capitalists are behind the enterprise. The line will connect with the Fox River Valley Line at Lake Geneva.

WAUPUN, WIS.—City Council has granted a franchise to Green Bay, Madison & Southwestern road, which it is proposed to build, connecting Green Bay with Madison.

WEST UNION, IA.—It is reported that the electric railway between Waterloo and Sumner will be extended to West Union.

MANKATO, MINN.—Oscar Claussen, of St. Paul, has been engaged by Mankato Street Railway, Light & Power Co. to prepare plans ond specifications for proposed street and interurban railway line, including power house.

KALISPELL, MONT.—Preliminary steps for organizing a company to construct a series of electric railways branching from Kalispell to all parts of the valley were taken by Chamber of Commerce recently. F. W. Tinkel, W. N. Noffsinger, McC. Wininger, and associates were appointed committee on organization.

ST. LOUIS, MO.—The St. Louis county court, at Clayton, has granted petition of St. Louis & Valley Park Ry. Co. for a franchise to construct an electric line from St. Louis to Valley Park. It is said that Eastern capital will finance the company.

SOUTH McALESTER, IND. T.—The South McAlester Electric Ry. Co. will construct an electric line in Second ward.

GUTHRIE, OKLA.—John W. Shartel, of Oklahoma City, has been granted a franchise to construct a street railway in this city.

GUTHRIE, OKLA. T.—Commodore S. L. Nelson, of Ft. Wayne, Ind.; Congressman-elect Wm. McKintry, of Champaign, Ill.; Geo. Duncan and Ed. Woodman, of Portland, Mo., are in the territory arranging for the construction of an electric interurban, which will connect Oklahoma City, Norman and Lexington, in Oklahoma, with Sulphur Springs, Ind. T.

BONHAM, TEX.—A franchise has been granted the Bonham-McKinney Electric Ry. Co. to construct and operate an electric railway over certain streets in this city.

SAN JOSE, CAL.—A survey is being made for an electric railway to Lick Observatory on Mt. Hallton. Two routes will be surveyed, one via Alum Rock Park and the other by way of Evergreen. The length of the line will be 20 miles and estimated cost is $500,000. K. P. Fisher is in charge of survey.

SAN DIEGO, CAL.—The Council took action on the application for a street railway franchise by E. Bartlett Webster by adopting the ordinance granting it. The line will have a terminus at Fourth and F Sts., and will run east on F to 25th St., and on 25th to B St. It is proposed to use gasoline motive power.

SANTA MARIA, CAL.—The Board of Supervisors of Santa Barbara County has granted the petition for a franchise for an electric road between Santa Maria and Guadalupe.

LIGHT, HEAT AND POWER PLANTS.

NORTH STERLING, CONN.—The Providence & Danielson Electric Ry. Co. will erect a power house here, developing the waters of Quadic brook. Reservoir and dam are planned.

SCOTTSVILLE, N. Y.—The Scottsville Electric Light & Gas Co. has been incorporated. It is capitalized at $20,000. Directors are: Merton E. Lewis, Henry C. Brewster, of Rochester; Isaac W. Salyerds and David C. Salyerds, of Scottsville.

MARTINSVILLE, VA.—An election will be held on Nov. 28 to vote upon issuance of bonds for an electric light and power plant. J. R. Gregory, Cy. Engr., estimates cost of plant at $60,000.

RICHMOND, VA.—Bids are asked until Dec. 1 by J. B. Woods, Chn. Com. on Lights, City Hall, for foundation, brick walls and buildings in connection with gas-holder for city gas works. Plans and specifications are on file at office of Robert W. Hunt & Co., Engrs., 70 Broadway, New York, and Colorado Bldg., Washington, D. C., and may be obtained upon payment of $5. W. P. Knowles, Supt. We are informed that value of contract is about $10,000 or $12,000. This work is in connection with gas-holder that was mentioned last week.

BLUEFIELD, W. VA.—Flat Top Gas Co. has been incorporated with $100,000 capital to manufacture artificial gas for light and fuel. Incorporators are: George W. Atkinson, H. A. Ritz, John M. Anderson, F. J. Browne, F. M. Peters, J. M. Sanders and A. J. Hearn.

BELTON, S. C.—It is reported that the J. F. Gallwan Building & Construction Co., of Palmer, Mass., has the contract for constructing dam on Saluda River for the Belton Power Co. It will be 600 ft. long, 30 ft. high and 35 ft. wide, of concrete and stone; 5,000 HP. probably will be developed. J. E. Sirrine, of Greenville, S. C., is Engr.-in-Charge.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

UNION, S. C.—Gadsden E. Shand, of Columbia, S. C., is engineer in charge of construction of the 15,000-HP. plant that will be erected at Gravel Shoals on Broad River by the Broad River Light & Power Co. E. W. Wynne, of Charleston, S. C., is Vice-Pres. Notice of incorporation, etc., on Nov. 10.

WALHALLA, S. C.—Jas. Thompson, Secy. and Treas. of the Oconee Water, Light & Power Co., states that it is proposed to construct a plant to cost from $100,000 to $120,000. No engineer has been selected yet. Noted last week.

THOMASVILLE, GA.—$35,000 of bonds for constructing an electric light plant are reported to have been voted.

COOKEVILLE, TENN.—An election will be held on Dec. 2 to vote upon issuance of $25,000 of bonds for installing an electric light plant and water-works.

CANTON, O.—The Citizens' Heat, Light & Power Co., incorporated with $100,000 capital, has applied for a franchise in this city. The ordinance granting the franchise has passed its first reading. Anthony Howells, A. C. Brant and others are interested in the company.

DELAWARE, O.—John G. Webb, George Whysall, Walter A. Block and others, of Columbus, O., have incorporated the Columbus Northern Railway, Power & Equipment Co., of Columbus, with a capital of $300,000. It is reported that a large power house to supply the electric railway with power will be erected. It is also proposed to erect sub-stations.

YOUNGSTOWN, O.—R. D. Campbell is Chn. of Council Committee appointed to investigate building of municipal electric light plant. Frank M. Lillie, Cy. Engr., is corresponding with Eastern engineers with a view of securing the services of one.

SPRING LAKE, MICH.—Bids are asked until 7.30 p. m., Dec. 1, for construction of an electric light plant for this village. Charles M. Kay, Clk.

BELDING, MICH.—A 30-year franchise has been granted to Henry J. Leonard, of Grand Rapids, for a gas and heating plant. A power house will be built from which mains and gas pipes will conduct heat and light to all parts of the city. Work must begin on its construction by July 1, 1905, under terms of franchise and be in operation by Dec., 1906.

DETROIT, MICH.—Plans are reported to have been prepared by A. C. Varney & Co., Archs., 58 Newbury Bldg., for a brick power house, with stack, for Albert Strelow, 694 Mack Ave. Stack will be 60 ft. high and 9 ft. 4 ins. in diameter. Bids will be received by architects soon.

MORRISON, ILL.—Geo. W. Whitcomb, Edward A. Smith and Harvey S. Green, of Morristown, have incorporated the Rock River Hydro-Electric Milling & Power Co., with headquarters at Morrison. Rock River will be dammed south of this city and power generated. Plant probably will be erected at Lyndon. Cost, about $100,000.

SPRING VALLEY, ILL.—Spring Valley Lighting & Power Co. has ben incorporated, with $100,000 capital, to operate light, heat and power plants. Incorporators: John McFadden, Reinhold Reichardt, Harry E. Brown, of Spring Valley.

MILWAUKEE, WIS.—A. F. Wardlaw, of firm of Robert W. Hunt & Co., 70 Broadway, New York, an electrical expert, has estimated cost of proposed municipal light plant at $700,000. Ordinance providing for issuance of $150,000 of bonds for this plant was defeated recently in common council. Another ordinance will be introduced. Chas J. Poetsch is Cy. Engr. Estimate, in detail, was as follows: (1) Location of plant to be near center of distribution, at a point on the Milwaukee River that will insure an ample supply of water as well as conveniences for receiving and unloading coal. Several locations were examined, but selections and cost of the same are not given. (2) 2,000 arc lamps of 2,000 c. p., nominal, each. There are now in service 1,910 lamps. (3) Total cost of power plant, including stack, boilers, condensing and steam apparatus, electrical machinery, stokers, coal and ash handling machinery, traveling cranes and all other apparatus, exclusive of the cost of land, will be approximately $175,000. Building and stack to be of ample size to facilitate the addition of 33% in output without change. Of the above total cost $30,000 is figured for the building and coal storage alone. This can be materially increased or decreased, depending entirely upon the architectural design of the building, the above figure covering a substantial fireproof structure, well built, and of pleasing appearance. (4) The total cost of all the outside equipment, considering the use of the underground work in the territory now covered by that class of installation, and overhead work beyond these limits, including all poles, mast arms, lamps, wires, cables, submarine cables, pole fixtures, conduits and other material installed, and complete, ready for service, is estimated to cost $472,805. (5) The cost of operating plant is estimated at $108,546 a year.

KEOKUK, IA.—An electric plant that will develop 60,000 HP. is planned for this city. If Congress grants permission a dam, 22 ft. high and approximately one mile long, would be built at foot of Des Moines Rapids. The company that is reported to back the project is the Keokuk & Hamilton Water Power Co., of which Hon. John N. Irwin is Pres. R. R. Wallace, Cashier of Hamilton, Ia., Bank, is Secy. Plans have been prepared by Lyman E. Cooley.

DULUTH, MINN.—The Great Northern Power Co., of this city, is said to have raised funds to begin work of developing water power of St. Louis River. Charles D. Barney & Co., of Philadelphia, bankers, and the General Electric Co. have taken up the issue of $4,000,000 worth of bonds of the Great Northern Power Co., it is reported by local papers. C. A. Duncan, of Duluth, is Pres. of the company.

MANKATO, MINN.—We are informed that the Mankato Railway, Light & Power Co. will receive bids on complete railway, light, heat and power plant about the middle of December. Plans and specifications are now being drawn by Oscar Claussen, Consult. Engr., National German-American Bank Bldg., St. Paul, Minn.

MELROSE, MINN.—It was voted on Nov. 8 to construct water-works and an electric light plant.

MINNEAPOLIS, MINN.—The Joyce-Pillsbury Co., of Minneapolis, has been incorporated, with $100,000 capital. Company is interested in lighting and heating. The incorporators are: W. T. Joyce, of Chicago; A. C. Akeley, Minneapolis; S. C. Gerhard, Minneapolis; A. F. Pillsbury, Minneapolis, and W. T. Watkins, St. Paul.

MONTGOMERY, MINN.—J. E. Anderson and S. A. Votapek are stated to have petitioned for a franchise for an electric light plant.

WINTHROP, MINN.—See under Water-Works.

FORT SCOTT, KAN.—Gatlin gas franchise has been passed by council. Gas plant and gas mains will be installed here.

PLYMOUTH, NEB.—The Nebraska Lighting Co., with a capital of $100,000, is reported to have been incorporated. A deed has been filed transferring the Plattsmouth Gas & Electric Light Plant to the new corporation. Extensive improvements are to be made at once. Charles C. Parmele is Pres.

DENVER, COLO.—Fire destroyed the tar plant of the Denver Gas & Electric Co. on Nov. 17, it is reported. Loss, $25,000.

GOLDEN, COLO.—The Board of Trustees of Colorado School of Mines has awarded contracts for the new heating and power plant as follows: Edward Seerie & Co., of Denver: excavating and foundations, $20,428; H. H. Toogood, for the completion of the building, $16,212.

JEFFERSON CITY, MO.—The Jefferson City Electric Light & Gas Co. plant has been sold to a Chicago syndicate for $100,000 that will expend $75,000 in improvements.

GREENVILLE, TEX.—Special election will be held on Dec. 7 to vote upon sale of municipal electric plant.

ARCATA, CAL.—A. H. Cheney, of the Madisen Mercantile Co., has purchased the Arcata electric light plant at about $20,500. This includes the plant as it stands, the franchise and poles and wires of the company. It is stated that after the formal transfer is completed the plant will be enlarged and improved.

ORANGE, CAL.—Orange Gas Co. has been incorporated, with $50,000 capital. M. L. Willets is Pres.

VACAVILLE, CAL.—See under Water-Works.

PHOENIX, ARIZ.—Green River Power, Land & Irrigation Co. is reported incorporated, with capital of $500,000, to engage in irrigation, canals, dams, electric power plant construction and operation. Incorporators: P. W. Barclay and Geo. C. Plummer. Headquarters to be at Phoenix.

FREDERICTON, N. B.—It is reported that Council committee will report favorably on the proposition to install an electric plant for lighting the municipal buildings in this city.

BRIDGES.

BRANT ROCK, MASS.—A petition is being circulated in Plymouth County towns, addressed to Secretary of War, asking that dyke at Marshfield, between Green Harbor and Cut River be abolished, and a bridge placed there. Water Peterson, of this town, may be able to inform.

PITTSFIELD, MASS.—We are informed that contract for building concrete-steel arch bridge over west branch of Housatonic River at West St., bids for which were opened Nov. 5, has been let to W. N. Flynt Granite Co., Monson, Mass., at a total of $5,300 for material and labor to assumed foundation, and at $8 per cu. yd. for work below assumed foundation. Bridge is to carry street railway, and is to have 40 ft. wide roadway and two 7 ft. wide sidewalks. A. A. Fobes is Engr. Bd. Pub. Wks.

BRIDGEPORT, CONN.—H. G. Scofield, Cy. Engr., is arranging for the protection of Washington bridge this winter from damage by ice floes. A new system of piling and rip-rap will be put in. A plan for the widening of western approach to Congress St. bridge has also been recommended by Maj. Powell, U. S. Inspector, and the plan will receive the consideration of new harbor committee of Common Council, to be selected by mayor next month.

NEW HAVEN, CONN.—A four-track roller lift bridge will be built on New York division of N. Y., N. H. & H. R. R., over Housatonic River, near Naugatuck Junction. The Sherzer Bridge Co., of Chicago, Ill., will put in the roller lift, and the approaches, to be of steel, will be erected by another contractor, yet to be chosen. C. M. Ingersoll, City, is Ch. Engr.

NEW YORK, N. Y.—The Aldermen have appropriated $125,000 for building of bridges across Gowanus Canal. These bridges will cross canal at Hamilton Ave., Third St., Ninth St. and Union St.

NEWARK, N. J.—A new bridge has been ordered built along Jacksonville and Hedding roads, near Mount Holly, to replace the one which recently collapsed. Cost, $2,200.

TRENTON, N. J.—The Chamber St. will be rebuilt by freeholders at earliest possible time.

TONESDALE, PA.—D. J. Nichol, Betz Bldg., Philadelphia, has been awarded contract for a concrete and steel bridge here. Cost, $40,000.

PHILADELPHIA, PA.—Council passed ordinance granting permission to Pennsylvania Railroad to extend its present bridge over Jefferson St.

PHILADELPHIA, PA.—John McMenamy, Harrison Bldg., has been awarded contract for bridge at Graver's Lane. Cost, $23,000.

BELAIR, MD.—We are informed that all bids received by County Commissioners, Nov. 14, for constructing two steel concrete bridges and abutments were rejected. The work will probably be advertised again. N. Bateman is County Clk.

SPARTANBURG, S. C.—County Commissioners will let contract for constructing a bridge across South Pacolet River, in Campobello township, on Nov. 29, 11 a. m.; contract will also be let Nov. 30, 11 a. m., for erection of a bridge across North Pacolet River. F. C. West is County Clk.

MONTGOMERY, ALA.—The contract for building steel highway bridge across Alabama River here was awarded to Chattanooga Bridge Co. Cost, $90,000. Work to begin at once.

NEW ORLEANS, LA.—The following bids were received Nov. 4 for constructing a viaduct over tracks of Southern Pacific Railroad at Newton St., in Algiers; bids were received for (a) footwalk on both sides, and for (b) footwalk on one side only: Wm. W. Bierce, Ltd., City, (a) $54,760, (b) $50,800 (recommended for acceptance); Noelke-Richards Iron Works, Indianopolis, Ind., (a) $68,080, (b) $62,860; Missouri Valley Bridge & Iron Co., Leavenworth, Kan., (a) $79,500, (b) $75,000; Penn Bridge Co., Beaver Falls, Pa., (a) $117,500, (b) $107,600; American Bridge Co., New York, (a) $92,100, (b) $86,100; Midland Bridge Co., Kansas City, Mo., (a) $141,800, (b) $136,000. W. J. Hardee is Cy. Engr.

CANTON, KY.—A $25,000 bridge will probably be built over Cumberland River at this place. Address County Clerk for information.

DAYTON, O.—Board Public Service adopted a resolution authorizing the Clerk to advertise for proposals for the erection of superstructure of Herman Ave. river bridge. Specifications on file in office of City Engineer.

PORTSMOUTH, O.—City Council will at once proceed to widen Findlay St., and provide a bridge over Lawson Run.

Write our advertisers when you intend to buy your supplies and machinery for improvements, or for carrying out your contracts. If you do not find what you want in our advertising pages write us for list of firms, and we will put you in communication with them at once.

INDIANAPOLIS, IND.—Bids are asked by Board Public Works until Nov. 25 for concrete abutments ... for Senate Ave. bridge. M. A. Downing, Chn.

DETROIT, MICH.—Engineers believed to be ... Pere Marquette are surveying on both sides ... Niagara Falls, and it is thought this is prelim... bridge project. F. H. Alfred, City, is Ch. Engr.

LANSING, MICH.—Platt Bros. have been awarded contract of raising bridge over Grand River ... Preston, City.

CAMBRIDGE, ILL.—W. H. Schott, of Chicago ... Kewanee, Cambridge & Genesee Electric Ry. ... reported as stating that about 2,000 ft. of bridge ... built by the company this winter.

CHICAGO, ILL.—Bids are asked by F. W. Block ... Pub. Wks., until Dec. 2 for constructing superstructure of Archer Ave. bridge, including machinery, ... trical equipments, operators' houses, etc. A deposit of $20 is required for the safe return of plans and specifications.

PEKIN, ILL.—Bids are asked by Road and ... Committee until Nov. 29, 2 p. m., for construction ... steel bridge over Circleville creek, in Sand Prairie Township. Plans and specification on file in office of ... Clerk.

RACINE, WIS.—The Common Council will advertise for bids for construction of a bascule bridge across ... at Main St., the present structure having been ... unsafe. The people voted in favor of Council's action to issue $65,000 bridge bonds to pay for improvement.

IOWA CITY, IA.—C. S. Macgowan, Prof. Engr. at University of Iowa, has been engaged to assist in staking out the big bridge that will be built over Iowa River at Scales bend.

SOUTH OMAHA, NEB.—It is expected that a new viaduct will be built at 44th and Q Sts.

MANDAN, N. DAK.—Bids are asked by H. J. T... County Audr., until Nov. 29 for furnishing material for an 80-ft. combination span bridge, on steel tubular piers.

MUSKOGEE, IND. T.—Geo. F. Morse, Ch. Engr., Missouri, Oklahoma & Gulf Ry. Co., City, will receive bids until Dec. 1 for constructing one 100-ft. span and two 80-ft. spans over Deep Fork and North Fork respectively.

TACOMA, WASH.—County Commissioners have awarded contract to Northwestern Bridge Co. for construction of second mile of pile bridge across Tacoma tideflats, for $7,883.

OREGON CITY, ORE.—A petition has been presented to County Court, and will be acted on at December meeting, for construction of a bridge across Clackamas River at Burghardt's mill.

PORTLAND, ORE.—The matter of erecting a high bridge across Willamette River from Peninsular at foot of Portsmouth Ave. is being agitated by F. I. McKenna and others.

CALEXICO, CAL.—The bridge at head of Date canal was ordered built by Supervisor Jasper. A petition is being circulated for a drawbridge, which, if constructed, will be paid for by both farmers and county.

LOS GATOS, CAL.—Bond ordinance calling for an election to be held Dec. 5 was read and ordered printed by Council. There will be $20,000 bridge bonds and $4,000 sewer bonds.

STOCKTON, CAL.—All bids for Rock Creek and Walker Lane bridge were rejected by Board of Supervisors, as bids of McMahon, which was the lowest, did not specify the cost of extra work. New bids will be received until Dec. 1.

LONDON, ONT.—The Hamilton (Ont.) Bridge Co. have contract for several bridges to be built along route of Southwestern Traction Co.'s railway between this city and St. Thomas.

BUILDINGS.

LEWISTON, ME.—St. Peter's parish will erect a church on site of present church on Bartlett St. Rev. Father Mothon is pastor.

SPRINGFIELD, MASS.—City Property Committee favors the erection of a building for Technical High School. Total cost would be $225,000. Gardner & Gardner are the Archs.

BOSTON, MASS.—Bids are asked until noon, Nov. 30, for building primary school on Fourth St., South Boston. Charles K. Cummings, Arch., 45 Kilby St. R. Clipston Sturgis, Schoolhouse Comr.

BROOKLYN, N. Y.—The $600,000 necessary for rebuilding the Academy of Music is said to have been raised by subscription. Abraham Abraham is Chn. of Committee on Sites. The new academy probably will be located near Fulton St. and De Kalb Ave. The Academy of Music Company will be incorporated with $1,000,000 to build the theater. Previously noted.

YONKERS, N. Y.—Geo. T. Kelly, 44 School St., is reported to be lowest bidder for constructing school No. 19, at $88,700.

BINGHAMTON, N. Y.—Dr. Charles G. Wagner, Supt. Binghamton State Hospital, will petition New York State Lunacy Commission for $75,000 appropriation for new buildings; $250,000 was granted by last Legislature for two buildings that are to be erected next year.

OSWEGO, N.Y.—Bids are asked until Dec. 21 by W. M. Coulling, Q. M., for construction of wagon shed and a coal shed at Fort Ontario, N. Y. (Advertised, Engineering News.)

BUFFALO, N. Y.—William Metzler, Supt. of Markets, is interested in project to build a $100,000 market building at Washington and Chippewa Sts.

Bids are asked by Francis G. Ward, Comr. Pub. Wks., until 11 a. m., Nov. 29, for the installation of a hot water heating plant in Engine House No. 1 and Hook and Ladder House No. 2, on South Division St. Also for making sundry repairs and alterations at Engine House No. 11 and Hook and Ladder House No. 4, on Niagara St.

ROCHESTER, N. Y.—Plans have been filed for new Buell Building to be erected on Main St. It will cost $80,000. J. Foster Warner is the Arch. Edward Strauchen has masonry contract.

NEW YORK, N. Y.—The Wells Bros. Co., 160 Fifth Ave., has been awarded the general contract for the amusement park to be located at 218th St. and Broadway, as noted on Oct. 13. The enterprise is to be known as "Wonderland." Kirby, Petit & Green, 23 West 34th St., are Archs. Harry Alexander, 20 West 34th St., is reported to have been awarded contract for electrical work that will amount to $250,000. Wells Bros.' contract is quoted at $1,000,000. Andrew J. Cobe, 13-21 Park Row, is president of company controlling the project.

Kirby, Petit & Green, Archs., 23 West 34th St., are reported taking bids on 4-story office and store building for The Bush Co., Limited, Coffee Exchange Building. It will be 22 × 77 × 85 ft., brick and stone, elevator, steam heat, concrete floors, etc. Building will be erected at Pearl and Broad Sts. Cost, $60,000.

NEW YORK, N. Y.—Plans have been filed by Bernstein & Bernstein, Archs., 72 Trinity Pl., for six 6-story brick tenements, 37 × 86 ft., to be erected on 154th St., east of Eighth Ave., for W. & J. Bachrach, 35 Nassau St. Cost, $[illegible].

By same Architects, for two 6-story flats on 138th St., east of Lenox Ave., for Samuel Levine & Son, 90 Canal St. Cost, $100,000.

By same Architects, for two 6-story flats on 139th St., east of Lenox Ave., for same owners. Cost, $100,000.

By G. F. Pelham, Arch., 503 Fifth Ave., for four 5-story flats to be erected on 147th St., west of Seventh Ave., for Samuel Rosenberg, 137 West 116th St. Cost, $152,000.

By same Architect, for two 6-story apartment houses on [illegible] St., east of Riverside Drive, for West Side Construction Co., 840 West End Ave. Cost, $170,000.

By same Architect, for three 6-story flats on Manhattan Ave. and 100th St., for Robert M. Soloman, 352 West [illegible] St. Cost, $160,000.

By Brower & Gayle, Archs., 1133 Broadway, for a 10-story brick and stone tenement, 152 × 90 and 84 ft., at Riverside Drive and 109th St., for Paul P. Pugh, 476 West [illegible] St. Cost, $600,000.

NEW YORK, N. Y.—Bids are asked by William McAdoo, Police Comr., until Dec. 1, 2 p. m., for erecting (except heating and ventilating systems, boilers and steam piping) building on block bounded by Grand, Centre and Broome Sts. and Centre Market Pl., for Police Department headquarters.

The following bids were received on Nov. 9 for a laundry and disinfecting plant at Flushing Ave., Jamaica, Boro. of Queens: Quinn & Son, 22 Hunters Point Ave., $56,668; W. E. Elder, Richmond Terrace, $54,971; James McArthur, Jamaica, $63,719; Geo. Hildebrand, 38 Park Row, $61,846; D. J. Ryan, 723 Third Ave., New York; H. H. Vought & Co., 112 West 42d St., New York, $44,-900; Kelly & Kelley, 39 East 42d St., $49,300.

WEST HOBOKEN, N. J.—Site will be obtained for new school; $150,000 appropriation is available.

ORANGE, N. J.—$125,000 of bonds will be issued for a new school to be located at Cleveland and Main Sts.

NEWARK, N. J.—Mutual Life Insurance Co. has awarded general contract for new building at Broad and Clifton Sts. to the V. J. Hedden & Sons Co., 1 Madison Ave., New York. Cost, $1,500,000.

PHILADELPHIA, PA.—City has acquired site at Broad St. and Snyder Ave. for proposed Manual Training High School.

It is reported that Architect Philip H. Johnson has been commissioned by the city to prepare plans for three police stations and two fire houses, the total cost of which is estimated at $130,000. The locations and cost of each are: Police stations—Seventh ward, $30,000; 14th ward, $25,000, and 20th ward, $40,000. Fire houses—Fifth ward, $20,000, and Bridesburg, $15,000.

PITTSBURG, PA.—Trustees of Western Theological Seminary have voted to raise $350,000 building fund. If this sum is raised $150,000 will be spent for new buildings. Rev. Dr. David Gregg is Pres.

Thomas J. Keenan will erect a 6-story fireproof, brick and steel store building, 20 × 160 ft., at 909 Penn Ave. Cost, $60,000. F. C. Sauer, 804 Penn Ave., is Arch. Mr. Keenan also will erect a 7-story fireproof building, 40 × 110 ft., at 938-940 Penn Ave. Cost, $100,000.

PITTSBURG, PA.—John W. Sherrer, City, will erect seven modern dwelling houses, each containing tile bathrooms, on Jackson St., East End. Cost, $45,000.

W. F. Trimble & Sons, Allegheny City, were awarded contract for erection of 2-story annex to the Farmers' Deposit National Bank building. Cost, $90,000.

WILKINSBURG, PA.—Board of Education will erect new 12-room brick and stone school building on South Ave., Second Ward. Cost, $50,000.

BLAIRSVILLE, PA.—John P. Kennedy, City, was awarded contract for the erection of 40 dwelling houses at Possum Glory, Indiana County, Pa., for the H. J. Weaver Coal Co., Philadelphia, Pa. Cost, $50,000.

WILMINGTON, DEL.—Building permit has been issued for a 5-story office building for Pennsylvania Ry. Co. Contract price is $80,500. Roydhouse & Ayers, of Philadelphia, are the contractors. Furness, Evans & Co., of Philadelphia, are the Archs.

BALTIMORE, MD.—Baltimore & Ohio Ry. Co. will erect a $2,000,000 office building at Baltimore and Charles Sts., it has been announced by Oscar Murray, Pres. This company will award contracts for 33 new passenger stations along the road. C. S. Sims, Camden Station, is Gen. Mgr.

WASHINGTON, D. C.—It has been suggested that the U. S. Government Building now at St. Louis be removed to Washington. District Commissioners have taken up the subject and have secured estimates for the work. Contractors have said that the building could be taken down, shipped to Washington and rebuilt by next March at a cost of $400,000. Congress will be asked for an appropriation.

NORFOLK, VA.—Bids are reported to have been received for the construction of U. S. Marine Corps barracks and officers' quarters as follows: (a) price for the barracks complete according to the plans and specifications; (b) price for the quarters (one single house and two double houses): Herman Probst, 10 West 22d St., New York City, (a) $115,970, (b) $68,970. Mankin & McGee, 812 East Main St., Richmond, Va., (a) $122,553, (b) $71,-338. Penn Bridge Co., Box 728, Norfolk, Va., (a) $99,-988, (b) $1,900 for one single and $21,783 for one twin. Doyle & Doak, 1509 Sansom St., Philadelphia, Pa., (a) $143,587, (b) $69,330.

WHEELING, W. VA.—Bids are asked by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., until Jan. 3 for construction of post office, court house and custom house building here.

WILMINGTON, N. C.—Hook & Sawyer, Archs., Charlotte, N. C., are reported to have drawn plans for 100-room hotel to be erected at Wrightsville Beach by W. J. Moore, of Charlotte.

CAMDEN, S. C.—Bids are asked until Dec. 17 by County Commissioners for erecting a court house here. J. M. Sowell, County Supervisor.

GEORGETOWN, S. C.—Bids for erecting post office and custom house here were received on Nov. 22, as follows: C. W. Gindele Co., Chicago, $48,500; Newman & Hoy, St. Paul, Minn., $49,646; Sanders Bros. Mfg. Co., Ottawa, $52,998; J. W. Miller, St. Paul, $53,940; C. E. Corson, Chicago, $58,887; Winchester & Cullen, Janesville, $59,-875.

GAINESVILLE, GA.—John Marriott, of Delaware, O., will prepare plans, it is reported, for proposed Chattahoochee Park Hotel. A. J. Warner, J. F. Moore, W. H. Slack, D. S. Greenleaf, G. M. Merrick and H. H. Dean have incorporated the Chattahoochee Park Hotel, with $100,000 capital.

TAMPA, FLA.—S. L. Biglow, Clk. Bd. Pub. Wks., writes us that bonds for $300,000 were voted for at recent election. $100,000 of this sum is for new city hall and site.

GAINESVILLE, FLA.—Bids are asked until Dec. 21 by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., for construction complete of a post office here. (Advertised, Engineering News.)

MOBILE, ALA.—$200,000 of bonds to be used for the construction of a jail, poor house and for improvement of court house were voted for at recent election.

PRATTVILLE, ALA.—The Board of Revenue of Autauga County will receive plans and specifications for building a new fireproof jail to cost about $15,000. For further particulars address G. S. Livingston, Judge of Probate, Prattville, Ala.

PURVIS, MISS.—Board of Supervisors of Lamar County have selected P. H. Weather, of Jackson, Miss., as architect to prepare plans and specifications for a $50,000 court house at this place.

HARTSVILLE, TENN.—Bids are asked until Nov. 26 for the erection of brick court house, 61 × 75 ft. Wheeler & Runge, Archs., Charlotte, N. C. A. C. Welch, Secy., Trousdale County Comrs.

NASHVILLE, TENN.—Bids are asked until Dec. 5 for remodeling four buildings and other work at the Arsenal, Columbia, Tenn., for the Columbia Military School. Thompson, Gibel & Asmus, Archs., 72, 73 and 74 Cole Building.

LEXINGTON, KY.—The Lexington Auditorium Co. may erect a 5-story building at a cost of $150,000. M. C. Alford probably may be addressed.

MEMPHIS, TENN.—The Business Men's Club has acquired a site on Monroe St. for its proposed clubhouse.

FRANKFORT, KY.—State Capitol Commission has accepted plans for proposed new Capitol building that were prepared by Frank M. Andrews, of Dayton, O. $1,000,000 has been appropriated for this purpose.

AKRON, O.—It has been voted to issue $275,000 of bonds for a new courthouse for Summit County.

VINCENNES, IND.—Bids are asked until Dec. 29 for construction complete of post office at this place. James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C.

FLINT, MICH.—Bids were received on Nov. 9 for the construction of U. S. Post Office (not including heating apparatus) at this city, as follows: John C. Schmidt, Toledo, O., $49,700; W. S. Piggins, Detroit, $52,356, and Geo. Richmond & Son, Kalamazoo, $47,400.

ADRIAN, MICH.—The following bids were received on Nov. 14 for the construction of the U. S. Post Office at Adrian: Geo. Richmond & Son, Kalamazoo, $42,500; D. H. Hayes, Chicago, Ill., $46,900, and J. G. Schmitt, Toledo, O., $56,840. All bids were rejected.

DETROIT, MICH.—Raseman & Fisher, Archs., 38 Buhl block, will receive bids, it is reported, about Jan. 1, for a store and office building for John Breitmeier's Sons, 22 Miami Ave. To be steel frame, fireproof construction, pressed brick with trimmings of Bedford limestone and terra cotta, 56 × 70 ft., eight stories and basement, steam heating, combination lighting, two electric passenger elevators, etc. Cost, $100,000.

CHICAGO, ILL.—It is reported that Barnett, Haynes & Barnett, Archs., Eighth and Locust Sts., St. Louis, Mo., are preparing plans for a clubhouse to be built on Michigan Ave., south of Monroe St., for the New Illinois Athletic Club, mentioned last week. William Hale Thompson, 1103 Ashland block, is Pres.; William A. Merigold, 140 La Salle St., vice-Pres.; Charles B. Pike, Pres. of Hamilton National Bank, is Treas.; and Charles Henry Genslinger, Secy. Clubhouse will be 12 stories, 71 × 171 ft., of fireproof steel construction, probably with pressed brick and stone front, steam heat, electric light, etc. Estimated cost, $500,000. It is probable that construction will begin next spring. Temporary offices are at 140 La Salle St.

Bids are asked until Dec. 16 by Commissioner of Public Works F. W. Blocki, 222 City Hall, for the removal of present superstructure and the erection of a new superstructure for the Lake View crib, about six miles from the mouth of the Chicago river in Lake Michigan. New superstructure will be 72 ft. in diameter, and 40 ft. high. Contract is for general work, plumbing, steam heating, and steel and iron work. Estimated cost, $65,000.

Bids are asked by Board of Education until noon, Nov. 25, for construction of the 3-story Harvard school on Harvard Ave., near 75th St. The specifications call for masonry, cut stone, sheet metal, composition roofing, structural iron, iron stairs, window guards, carpentry, hardware, painting and finishing, glass and glazing, fireproofing, lathing and plastering, concrete floors, asphalt floors, steps, tile floors, telephones and bells, window shades, steam heating, heat regulation, ventilation, plumbing and gas fitting, sewerage and electrical work. Estimated cost, $100,000.

EVANSTON, ILL.—James Gamble Rogers and Charles A. Phillips, 1615 Ashland block, Archs., Chicago, has prepared plans for a public library building to be built at Orrington Ave. and Church St., three stories, 54 × 146 ft., of stone with steam heat, electric light, marble and mosaic work, structural steel and iron work, etc. Cost, $100,-000. John W. Thompson is Pres.; J. Seymour Curry, vice-president; and J. Seymour Curry, Secy. of Library Board.

ST. PAUL, MINN.—An additional appropriation of $250,000 for proposed post office will be asked for by Congressman Fred. C. Stevens of St. Paul. This would bring total appropriation to $1,000,000.

H. L. Taylor and G. S. Waltham, of Sanitarium Commission, will petition Legislature for $150,000 appropriation for erection and equipment of new building at Walker.

J. Walter Stevens, Arch., is reported to be preparing plans for a wholesale house to be erected at Sixth and Wacouta Sts., for G. Sommers & Co. It will be 150 × 150, seven stories and basement, of pressed brick and cut stone, iron columns and plates, steel beams, fire escape, elevators, gas and electric lighting, steam heating, etc. Excavating will be done this winter and contracts will be let soon. Cost, $200,000.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

OTTAWA, KAN.—$20,000 jail will be erected.

PITTSBURG, KAN.—State Board of Normal Regents has recommended that Legislature appropriate $60,000 for new school in Pittsburg.

SEWARD, NEB.—At recent election it was voted to erect a court house and jail to cost $100,000.

ST. LOUIS, MO.—An ordinance has been introduced in the municipal assembly providing for an election April 4, 1905, on the issuance of $9,000,000 of public improvement bonds.

DALLAS, TEX.—New building for the Southwestern Medical College will cost $75,000, it is reported. Dr. Robert S. Hyer is interested.

HOUSTON, TEX.—Mackenzie & Torre, Archs., Tulane-Newcomb Bldg., New Orleans, La., inform us that they are preparing plans for a 12-story steel frame, office building for the Cornucopia Pub. Co. of Houston. Reinforced concrete floor, 82 × 118 ft., enameled brick, terra cotta and marble. Exterior, four electric elevators, machinery, power plant, roof garden, lighting plant; fitted throughout with Tabor sash-pivots. Costing, $300,000. Plans ready for bid in two months. E. C. Robertson, 511½ Main St., is Secy. of Co.

PORT TOWNSEND, WASH.—Bids are asked until Dec. 15 for the erection of a wagon shed, fire apparatus building, teamsters' quarters, enlargement of stable and quartermaster shop at Fort Worden; wagon shed, teamsters' quarters and enlargement of stable at Fort Casey; and coal shed, wagon shed and enlargement of stable at Fort Flagler, Wash. Geo. H. Penrose, Q. M.

PORTLAND, ORE.—Bids are asked by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., until Dec. 13, for the installation of an electric passenger elevator in the United States postoffice and courthouse at Portland.

TILLAMOOK, ORE.—Plans and specifications and bids are asked until Dec. 5 for construction of a stone, brick or concrete court house for Tillamook County. Structure to contain three vaults and all necessary room for offices and court room, jury room and jail; cost from $18,000 to $30,000. G. D. Lamb, County Clk.

MARYSVILLE, CAL.—A new public library will be constructed at Fourth and C Sts. to cost $70,000. John Q. Pichard is interested.

STOCKTON, CAL.—Plans and specifications will be received until Dec. 12 for a building or shed 300 ft., more or less, in length by 31 ft. in width, to be erected on the south side of Stockton channel. Geo. S. Wheatley, Cy. Clk.

SONOMA, CAL.—Bids are asked until 8 p. m., Dec. 7, for the erection of a city hall in the Plaza. Item No. 1 is for excavation and stonework; (2) carpenter work, except flooring, doors, sash and standing finish; (3) roofing, tinning and galvanized iron work, complete. J. B. Small, Cy. Clk.

FRESNO, CAL.—Bids will be advertised for building county hospital and jail.

SALT LAKE CITY, UTAH.—Bids are asked by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., until Dec. 8, for the installation of two electric passenger elevators in the United States courthouse and postoffice at Salt Lake City.

CALGARY, N. W. T.—F. J. Lawson, Arch., has plans for a new building to be erected by T. J. S. Skinner. It will be of local grey sandstone and pressed brick, electric elevators. There will be 150 bedrooms. Estimated cost is $150,000.

WINNIPEG, MAN.—Election will be held in December to vote upon issuance of $100,000 of bonds for new police station.

ST. JOHN, N. B.—Alderman McGoldrick will introduce an ordinance in Council to build a city hall.

MONCTON, N. B.—Bids are asked by D. Pottinger, Gen. Mgr. Intercolonial Ry., until Nov. 28 for building a station at Alton, N. S.

WATER SUPPLY AND IRRIGATION.

SANFORD, ME.—An 800,000-gallon standpipe of the Sanford Light & Water Co. is reported to have burst Nov. 17.

SULLIVAN, ME.—Sullivan Harbor Water Co. has been organized here with $50,000 capital to supply this town with water. Emery B. Dunbar, Sullivan, is Pres.

HOLYOKE, MASS.—Holyoke Water Commissioners are to lay a 6,500-ft. long 12-in. main from Ashley Ponds to the Brightside Section, according to reports.

SPRINGFIELD, MASS.—At meeting of Council, Nov. 17, Allen Hazen, Consult. Engr., 220 Broadway, New York, submitted his report on the local water question. Two propositions were offered, the first including construction of single filter plant and pumping station at Ludlow, a systematic reduction of the consumption of water, the building of a preliminary filter at Ludlow, the building of a new covered reservoir at Van Horn, and in improving water-shed at Ludlow. This plan, it was estimated, could be carried out for $470,000, the cost of the single filter and pumping station being placed at $350,000, the preliminary filter at $50,000, the new covered Van Horn reservoir at $50,000, and the watershed improvements at $20,000. The second proposition included the building of the Ax Factory reservoir substantially as recommended by the special commission, as mentioned in our issue of Nov. 10, at an expense of $266,000, building of a new 36-in. pipe-line to the city, at a cost of $405,000; building of a larger covered reservoir at the Van Horn, at a cost of $75,000; building of larger filter plant, at a cost of $450,-000; raising of the level of the Ludlow reservoir, improvement of the canals, at a cost of $50,000, and other improvements, making total expense of plan $1,330,000. In addition the building of an additional storage on Jabish Brook, at a cost of $400,000, when necessary, was considered.

OXFORD, MASS.—Oxford Water Co., with which town has voted to contract for supply for five years, met Nov. 19 for organization. Lawrence F. Kilty, John E. Hammond and Chas. H. Wellington are interested.

WORCESTER, MASS.—Council Water Committee will recommend the extension of water service in Hadwen Road, Avon Ave. and Shale, Woodward and Norfolk Sts.

CHICOPEE, MASS.—Council Committee, Alderman Simpson, Member, has been appointed to secure figures on securing water supply from Willimansett Brook. They are also to secure estimates on cost of converting the brook and pond into a city reservoir.

EASTHAMPTON, MASS.—Engineers are stated to have reported adversely to construction of a reservoir for this town at West Farms, on Bassett Brook. E. G. Davis, Northampton, Mass., was Engr.

WICKFORD, R. I.—Wickford Light & Power Co., according to reports, is seeking to have Wickford Fire Corporation assist in establishing a public water system by

appropriating money to take a sufficient number of hydrants for fire protection, and the company may also ask the taxpayers to light the streets by electric lights.

BRIDGEPORT, CONN.—We are informed that plans and specifications are now being made for a 45 ft. high, 700 ft. long, concrete dam, which the Bridgeport Hydraulic Co., Sam P. Senior, Engr. and Supt., is to build in the spring.

LOCKPORT, N. Y.—Council may call special election to vote on matter of water supply for city. Three propositions will probably be submitted to the voters for decision, the Niagara River source, the Niagara, Lockport & Ontario Power Canal Co. proposition, and the Tonawanda Creek source.

NEW YORK, N. Y.—Bids were received Nov. 16 by the Commissioner Water Supply, Gas and Electricity for (1) furnishing and laying water mains in various streets of Manhattan Borough, for (2) water mains in various streets of Queens Borough, and for (3) water mains in Boroughs of Manhattan and the Bronx; itemized bids for latter piece of work are given under Contract Prices. The total bids received for each piece of work were as follows: Norton & Dalton, 27 W. 140th St. (1) $96,037, (2) $68,906, (3) $98,733; Phoenix Construction & Supply Co., 519 E. 80th St., (1) $97,999; Louis Gregory, New York, (1) $101,183; Jno. Cornwell, 69 E. 127th St., (1) $98,770, (3) $105,305; Lloyd Collis, 13 Park Row, (1) $104,142, (3) $107,305; Cunningham & Kearns Contracting Co., 431 E. 91st St., (1) $98,432, (2) $71,875, (3) $101,988; Wilton Contracting Co., Williamsbridge, N. Y., (1) $97,582, (2) $69,282, (3) $102,622; P. Goodman, 168 E. 117th St., (1) $107,125, (3) $111,893; Burns & Rodgers, 1909 Amsterdam Ave., (1) $90,241, (3) $96,345; Clinton Beckwith, Jerome Park, (1) $98,735, (2) $70,140; Thos. Touey & Co., Flushing, N. Y., (2) $71,879; Queens Borough Contracting Co., Long Island City (2) $69,854; Peace Bros., Flushing, (2) $70,911.

NEW YORK, N. Y.—Following bids were received by Commissioner Water Supply, Gas and Electricity Nov. 16 for furnishing, delivering and laying 20-in. water main in various streets of Brooklyn Borough: Jno. J. Cashman, Brooklyn, $55,032; I. Harris, Brooklyn, $43,429; Murphy Bros., Brooklyn, $57,041; Borough Contracting Co., Brooklyn, $64,861; H. Newman, Brooklyn, $49,781.

GARFIELD, N. J.—Another special election may be called to vote on matter of municipal water-works, as Supreme Court has decided that former election was illegal. Wm. P. Hepworth is Mayor.

PENNGROVE, N. J.—Penngrove Water Supply Co. has been incorporated, and will soon have plans made and invite bids for construction of water-works here.

DUNBAR, PA.—Water-works for this town discussed; supply would be pumped from Youghiogheny River.

CRESSON, PA.—Company, capitalized at $10,000, which proposes to supply this place with water has been chartered. W. Campbell, H. C. Mackenzie and Edward Sell, all of Philadelphia, are interested.

PITTSBURG, PA.—Local reports state that ordinances were to be introduced in the Council to provide for the letting of contracts for a filtration plant. The work is to be divided into ten sections. Bonds for the work has been authorized by vote of Council and citizens, but suits have been brought to prevent their issue.

An ordinance has been before the Council providing for awarding of a contract for not more than 5,000 meters, the purchase price of which is not to exceed $60,000. E. M. Bigelow is Dir. Pub. Wks.

READING, PA.—As the project for a $1,000,000 bond issue was defeated at the last election, it is now reported that a number of Councilmen are advocating the leasing of the city water-works for 50 years for $1,500,000, the money to be used for permanent improvements.

WILLIAMSPORT, PA.—Williamsport Water Co., according to reports, may sink another well next spring, and may also install a new pump.

PHILADELPHIA, PA.—Contract for constructing preliminary filter plants at Torresdale and Belmont has been let to D. J. McNichol, 704 Betz Bldg., Philadelphia, for $1,334,000 and $218,000 respectively. Bids were opened Nov. 1.

AMSBRY, PA.—The Beaverdale Water Co. and the Adams Water Co. have been merged into one corporation under the name of the Beaverdale Water Co.

ROUZERVILLE, PA.—Rouzerville Water Co. is considering increasing capital stock from $3,000 to $10,000 for the purpose of enlarging its plant.

SLIPPERY ROCK, PA.—Borough has voted unfavorably to erection of municipal water-works.

WILMINGTON, DEL.—Bids were received by the Water Commissioners Sept. 26 for construction of new water system for this city. The delay in awarding contracts is stated to be due to the fact that the Commissioners have been unable to secure the desired water rights. As an alternative in case the first plan should be abandoned, Theodore A. Leisen, Ch. Engr., Water Comrs., has submitted a new project, which calls for a total expenditure of $667,000, divided up as follows: 3,600 ft. 54 in. steel pipe, $43,000; 4,000 ft. 54 in. steel pipe, $48,000; creek crossing, $13,800. Total for mains, $105,000. New 5,000,000-gallon water pumps, $15,000; new 10,000,000-gallon steam pumps, $50,000; new boiler equipment, $15,000; addition and alteration of buildings, etc., $30,000; preliminary filters, $30,000. Sand filters, $144,000; covering, $40,000; regulating houses, $12,000; sand washers, $4,000. Total, $200,000. Filtered water reservoir, 16th and Walnut Sts., $50,000; Rodney St. reservoir, $85,000; engineering and contingencies, 15%, $87,000.

WASHINGTON, D. C.—Bids are asked by the Chief Engineer of Reclamation Service, U. S. Geological Survey, until Jan. 9 for the construction of an outlet tunnel about 125 sq. ft. cross-section and about 500 ft. long, and two vertical shafts in solid granite, to serve as a diversion tunnel for the Pathfinder Dam, about 50 miles southwest of Casper, Wyo., on North Platte River. (Advertised, Engineering News.)

CHARLOTTE, N. C.—Contract for constructing new building for water-works of this town has been let to Harmon S. Palmer Concrete Building Block Co., Washington, D. C., for $19,376.

MARION, N. C.—We are informed that the proposed new municipal water works of this place will require compound duplex pump, boiler, feed-water heater, wells and reservoir; also 4½ miles of pipe and appurtenances. Contractor is desired who has had experience in putting down large curbed wells in gravel formation. Bids for the work are asked until Dec. 17, as advertised in Engineering News of Nov. 17. R. L. Greenlee, Winston, N. C., is Des. Engr., and J. MacNaughton, Chn. W. Com.

MANNING, S. C.—This city, according to reports, will consider propositions for construction of water-works system. C. R. Sprott is interested.

WALHALLA, S. C.—Jas. Thompson writes us that projected $25,000 water-works of Oconee Water, Light & Power Co. will require 150,000-gallon stand-pipe, 20 hydrants, one mile 6-in., two miles 10-in. and four miles 3-in. pipe.

ATLANTA, GA.—Contract for constructing coagulating basin has been let to Griffin & Fitts, Atlanta, Ga., for $9,350.

FORT McPHERSON, GA.—Bids are asked until Nov. 29 for sinking 10-in. deep well at this post. Capt. B. B. Buck, C. Q. M., U. S. A.

GRACEVILLE, FLA.—We are informed that Ludwig & Co., Atlanta, Ga., are to be Des. Engrs. for projected plant of Graceville Electric Light & Water Co. Supply is to be from artesian wells. W. B. May is Asst. Supt.

MONTGOMERY, ALA.—Bids are to be called soon, according to reports, for new 8,000,000-gallon pump for city water works. R. S. Williams is Cy Treas.

ABBEVILLE, ALA.—The Courts have refused to dissolve injunction against Mayor and Council of this city restraining them from issuing $20,000 of bonds to build water-works and electric light plant.

MONTGOMERY, ALA.—Bids are asked until Dec. 5 for furnishing this city with gate valves, gate boxes and fire hydrants. R. S. Williams, Cy. Treas. (Advertised, Engineering News.)

NEW ORLEANS, LA.—See under Sewerage.

ABERDEEN, MISS.—The date for receiving bids for materials and construction of complete system by waterworks, with mechanical filter for this city, has been extended from Nov. 24 to Dec. 7, as is stated in our advertising columns. Specifications for the above work are on file at office of Engineering News, 220 Broadway, New York.

CORINTH, MISS.—This city has purchased local waterworks for $50,000, according to reports.

COOKEVILLE, TENN.—Election is to be held Dec. 2 to vote on $25,000 bond issue for putting in water-works and electric light plant.

MEMPHIS, TENN.—It is reported that water mains will be laid in the lumber district of North Memphis at a cost of $15,000 for fire protection purposes. Lawrence Simpson is Supt. Memphis Artesian Water Dept.

BARBOURSVILLE, KY.—Chicago parties are to apply for franchise for water works here, according to reports. T. D. Tinsley, Secy. Commercial Club, may be able to give information.

PRINCETON, KY.—City has voted to issue $35,000 of bonds for installing water-works.

CANTON, O.—Bids are asked by Board Public Service until Dec. 19 for furnishing a vertical triple expansion pumping engine of 12,000,000 gallons capacity, three boilers of 200 HP. each, three smokeless furnaces or stokers, two 20-in. and two 30-in. hydraulic operative valves. Louis B. Ohliger, Supt. W. W.; C. A. Zellars, Clk. Bd. Pub. Ser. (Advertised, Engineering News.)

COLUMBUS, O.—At the recent election it was voted to authorize issue of $1,200,000 of bonds for filtration plant purposes.

CRESTLINE, O.—We are informed that contracts for projected water-works improvements will be awarded in January. Supply is to be from flowing wells, appliances for lifting the water, however, will be attached. An iron pipe line will be laid to the wells and in the form of a belt line around the city. The estimated cost of the work is $15,000, and 20-year bonds, 4½%, for that amount will be issued. F. W. Foote is Mayor.

GIRARD, O.—E. P. Lawrence is on committee to decide on plans for installation of water-works and sewers for this town.

NEW CARLISLE, O.—We are informed that plans for water-works system for this place have been submitted to the Council. W. H. Sterrett is Mayor.

EVANSVILLE, IND.—Water-works Trustees, E. G. Heeger, Pres., are reported to have given the contractors who were awarded contract Aug. 11 for repairing intake at city water-works, notice of intention to cancel the contract. The cost of the work was estimated at about $29,000.

HOUGHTON, MICH.—Council on Nov. 10 awarded contract to Gould Pump Co., for two 220-volt, 40-HP. G. E. motors, attached to two 8¼ × 10 Gould pumps of a capacity of 500,000 gallons each.

MENOMINEE, MICH.—At a special election it was voted not to purchase the local water system.

CHICAGO, ILL.—Following bids were opened by Department Public Works, Nov. 17, for furnishing two pumps, each of 40,000,000 gallons capacity: Allis-Chalmers Co., $209,000; William Tod, $227,000; Henry R. Worthington, $178,500; Holly Manufacturing Co., $199,750.

EUREKA, ILL.—We are informed that nothing will be done this year toward new water-works system, but that action will probably be taken next year. B. D. Weeks is Mayor.

CHARITON, IA.—City has voted to install municipal water-works.

MARTELLE, IA.—Town has voted against construction of water-works.

WINTHROP, MINN.—C. A. Schilling, Village Recdr., writes us that contract was let Nov. 10 to Electric Machinery Co., Minneapolis, Minn., for $7,530 for extension of water mains and electric light plant for village. J. F. Johnson, Gibbon, Minn., was Des. Engr.

MELROSE, MINN.—Mayor J. E. Campbell writes that nothing is contemplated toward proposed extensions of city water-works until next spring. No estimates have been made, nor had Des. Engr. been engaged, but it is thought that works will cost about $20,000.

HOISINGTON, KAN.—Burns & McDonnell, Consult. Engrs., Kansas City, Mo., have been employed to prepare plans and specifications for system of water-works for this place, to cost approximately $25,000.

HUMBOLDT, KAN.—A $45,000 water-works bonds issue has been voted by this city. Burns & McDonnell, Kansas City, Mo., have been employed to prepare plans and specifications.

LA HARPE, KAN.—Special election may be called to vote on $15,000 bond issue for water-works improvements.

GILTNER, NEB.—Contract for constructing compressed air system of water-works at this place is stated to have been let to Nicholson & Hamilton, Springfield, Neb., for about $12,000.

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BELLE FOURCHE, S. DAK.—Government ... charge of the Belle Fourche irrigation proj... to have completed their surveys, and work ... on the ditch, it is said, as soon as neces... manded by the government is set aside. ... acres of land would be reclaimed by the proje... the government has set aside an appr... $2,100,000.

KANSAS CITY, MO.—Ordinances have been ... viding for 20-in. main in the West bottom ... Creek to 12th St., to cost $11,500.

SALISBURY, MO.—Referring to recent issu... of bonds for water-works improvements, we ... that it is desired to contract with parties to dri... before contracting for anything else. T. A. ... Mayor.

CENTRALIA, MO.—Water-works agitated.

ARGENTA, ARK.—Securing of municipal w...rks and lighting plant is agitated. Alderman Gus J... interested.

JEFFERSON, TEX.—Bids are asked until D... for construction of water-works for this city, to ... of 40,000-gallon steel tank and tower 60 ft. high, ... ft. c.-i. mains, 14 hydrants, combined gasoline en... and pump of capacity of 15,000 gallons per hour, a... pump house and intake. Edward J. O'Beirne, ... Memphis, Tenn.; J. H. Rowell, Sr., Mayor. (Adv...ed, Engineering News.)

DENVER, COLO.—Preliminary investigations ...ing to the government construction of the lower Rio ...de irrigation project have been made by Arthur D. ...well and Harry A. Storrs, Engrs., U. S. Reclamation ...ce, Denver. The undertaking contemplates the irriga... of 180,000 acres of land in the vicinity of Las Cru... N. Mex., and extending partly into Texas, and propo... construction of a dam 250 ft. high and ¼ mile wide, ...ated near Engle, on the lower Rio Grande.

ROMEO, COLO.—Referring to projected irrigation work of Conejos Reservoir Co., Albert R. Smith, Secy., wr... us that they are not ready to let contracts as yet. Th... estimated cost is $100,000, and source of supply is from Conejos River, 35 miles distant. Homer Neel, Rom... is official in charge, and J. C. Ulrich, Denver, Colo., is Des. Engr.

COLVILLE, WASH.—County Surveyor Bowen is stated to be making survey for water-works for this town, and matter will be voted on at election in December. Water is to be conveyed in a flume from a spring two miles from town to a reservoir situated on a hill, at elevation of 252 ft. above Main St. Steel pipes will be used for the mains.

COLFAX, WASH.—Referring to proposed extension of city water system at est. cost of $50,000, we are informed that the steel pipe contract has been let, and that contract for balance of wood pipe was to be let Nov. 14. J. N. Miller is Des. Engr.; H. Van Schoick is Mayor.

NORTH YAKIMA, WASH.—We are informed that contract for drilling artesian well was not awarded Nov. 9, but will be readvertised and contract awarded Dec. 5th. The estimated cost is from $3,000 to $5,000. Specifications call for a depth of 1,000 ft., or until a flow is struck, and hole to be not less than 4½ ins. when completed. W. F. Meloy, North Yakima, is Des. Engr.; W. B. Newcomb, County Audr.

ATHENA, ORE.—Doing away of present pumping method of water system and installation of gravity system is under consideration. W. J. Miller, as Engr., is to survey a location for a reservoir site, and furnish estimate on installing a gravity system, which it is thought could be connected with the present water mains at cost of about $10,000.

BEND, ORE.—Bend Water, Light & Power Co. has been incorporated with $10,000 capital. A. L. Goodwille and W. E. Guerin are interested. (Post Office, Deschutes.)

YUBA CITY, CAL.—Butte County Canal & Irrigation Co. has applied to County Supervisors for franchise rights for its projected irrigation canal.

SAN FRANCISCO, CAL.—City Engineer has reported to Board of Supervisors on proposed Twin Peaks auxiliary high-pressure water supply system, for which $150,000 was appropriated. He recommends that proposed 20,000,000-gallon reservoir be located at an elevation of 755 ft.

MOUNTAIN VIEW, CAL.—Town Trustees on Nov. 10 awarded contract for laying pipes and erection of buildings for municipal water-works to Williams & Bel...er, San Francisco, Cal., for $15,397.

FULLERTON, CAL.—G. W. Sherwood is stated to have a plan for increasing the supply of the water system of Fullerton by installing six electrical pumping plants, putting down additional wells, etc., at an estimated cost of $21,000.

SAN FRANCISCO, CAL.—Bids are asked by Major C. A. Devol, Q.-M., U. S. A., until Dec. 2 for furnishing steam pump, pipe, and fittings for Camp Merritt, P. I.

WHITTIER, CAL.—Frank H. Olmstead, C. E., Los Angeles, Cal., is reported to have completed the plans for proposed new water system for this place. Total cost is $108,000, divided up as follows: Pipe, complete, $41,000; labor, $12,000; boiler, $8,000; pumps, $12,000; air compressor, $6,500; feed pumps and heater, $1,500; purchase of well site, $4,200; buildings, $4,000; reservoirs, $10,000; expense for cast-iron main, $3,400; incidentals, $1,000.

ORANGE, CAL.—City Trustees have adopted resolution declaring it a public necessity that the city acquire and construct a water-works system, and that bonds should be issued to cover the costs.

PASADENA, CAL.—We are informed that matter of municipal water-works has been taken up with engineers, who have not reported as yet. Wm. H. Vedder is Mayor.

RIVERSIDE, CAL.—Welwood Murray has filed a claim to 300 inches of water in the canyon back of Palm Springs for irrigation, storage, power and domestic use.

SANTA BARBARA, CAL.—We are informed that contract for furnishing about 15,000 ft. 6, 9 and 11-in. pipe, bids for which were received Nov. 7, has been let to J. D. Hooker Co., Los Angeles, Cal. G. F. Trenwick is Secy. Water Comrs., and Victor Trace, Supt. W. W. Dept., is official in charge.

VACAVILLE, CAL.—Plans are stated to have been filed for a municipal water, sewer and electric light system, to cost $65,000. Bond issue will be held Dec. 6.

VALLEJO, CAL.—A $60,000 bond issue probably will be voted on for extending enlarged water main from Creston to Green Valley.

VENTURA, CAL.—The Mound Water Co. has been organized by the farmers in the Mound District, with capital of $100,000. H. H. Neel, E. P. Foster, J. C. Daly are interested, and steps will be taken immediately to develop a water supply.

PHOENIX, ARIZ.—Decision has been rendered in the District Court against the Pheoenix Water Co. in its action against the Common Council of this city, seeking

annul an election wherein the taxpayers voted for the ... of $300,000 municipal bonds for the construction of ... ty water system. An appeal has been taken.

HOENIX, ARIZ.—Southern Arizona Irrigation Co. has ... incorporated with $5,000,000 capital to take up, it ... ated, the construction of the South Gila dam and ... gation enterprise, which was abandoned by the South ... Co. in 1893. H. D. Underwood, Los Angeles, Cal., ... J. A. Kurtz and E. J. Bennitt, Phoenix, are incor-ators.

OLUMBIA, NEV.—The Columbia Water Co. is stated ... e considering plans to provide for the extension of the ... n pipe to a point on the Columbia Mountain.

AZEN, NEV.—Bids are asked at office of U. S. Re-nation Service, Hazen, until Dec. 15, for the con-ction of about 150 miles of lateral irrigation ditches ... headgates, falls, weirs and bridges and for the ... son River old channel canal, involving about 1,000,000 ... yds. of earth work, for the irrigation of lands in the ... nity of Leetville and Fallon, in Carson Sink Valley, ... ada. Bids will also be received on excavation and ... bankment and necessary structures for one or more ... sions, which will approximate 250,000 cu. yds. each. ... vertised, Engineering News.)

OISE, IDAHO.—Directors of Nampa & Meridian Irri-on District have called a special election for Dec. 13, ... decide upon the issuance $661,000 of bonds for the ... hase of the Ridenbaugh canal system, owned by the ... & Nampa Irrigation Co. If successful, the present ... will be enlarged, a dam will be constructed in the ... River and reservoirs constructed for storage of ... Purchase price is to be $270,000; cost of pro-posed improvements, $391,274.

PETERBORO, ONT.—C. H. Keefer, C. E., Ottawa, Ont., ... to report on project for erection of new water-works for this place.

TORONTO, ONT.—By-law is to be voted on Jan. 1 to set aside $261,000 for mains, valves, hydrants, etc., and $145,000 for engines and pumps.

TORONTO, ONT.—Provincial Board of Health has approved the plans of the proposed water-works systems of Creemore, East Toronto and Thamesville.

VANCOUVER, B. C.—Col. Thos. H. Tracy has prepared estimates for water-works extensions, including a second pipe across the Narrows. The cost of the work is set at more than $100,000.

SEWERAGE.

SALEM, MASS.—United States Cast-Iron Pipe & Foundry Co., 80 Broadway, New York, has been awarded the contract for cast-iron pipe for outfall sewer and for sewer at Collins Cove; it aggregates 10,000 ft. of 30-in. pipe and 1,600 ft. of 60-in. Cost, about $50,000.

BUFFALO, N. Y.—The following bids were received for sewer and drainage work at the 65th Regiment Armory: John T. Stadler Co., $28,300; John D. Smith & Co., 51 Pearl St., $23,400; Barud & Geiger, 11 East Mohawk St., $24,100; Timothy McEvoy & Son, 414 Magara St., $22,-900. All of Buffalo..

NEW YORK, N. Y.—Bids are asked until Dec. 7 for constructing several sewers in Brooklyn Boro. Martin W. Littleton, Boro. Pres.

BROOKLYN, N. Y.—H. A. Rutan, of Rutan & Heningham, 4 Court Sq., is reported to have been lowest bidder on Greenwood Ave. sewer.

ELIZABETH, N. J.—P. J. Ryan, Mayor, informs us that matter of building a sewer along Elizabeth River, as noted last week, is not under consideration at present.

HACKENSACK, N. J.—Borough of Oradell has voted to issue $50,000 of bonds for construction of sewers.

WEST ORANGE, N. J.—Bids are asked until Dec. 20 for building Sections Four, Five, Six and Seven of the town sewer system. Work will be let in four sections, each containing about four miles. Alex Potter, 143 Liberty St., is Ch. Engr.; W. M. Brien, M. D., is Chn.; J. McDonough, Town Clk. (Advertised, Engineering News.)

PHILADELPHIA, PA.—Peter Costello, Dir. Pub. Wks., will readvertise for bids for extension of Pratt and Magee Sts. main sewers. $75,000 is available for Pratt St. and $40,000 for Magee St. work. All bids received recently for these sewers were rejected.

GALLITZIN, PA.—Borough has voted to issue $20,000 of bonds for sewers and a municipal building.

MARION, S. C.—Proposition to issue $25,000 of sewer bonds will be voted upon Dec. 13. P. B. Hamer is Clk.

DARLINGTON, S. C.—Chas. C. Wilson, Engr., Columbia, S. C., writes us that bonds have been voted and surveys and plans completed for proposed sewer system. Bids will be called for about Jan. 1. There will be about 32,000 ft. of 8 to 18-in. sewer pipe, with average cut of 10 ft. Cost is estimated at $30,000.

TAMPA, FLA.—S. L. Biglow, Clk. Bd. Pub. Wks., writes us that $300,000 of bonds were voted for at recent election. This money will be used for sewers, paving, etc.

NEW ORLEANS, LA.—Bids are asked until Jan. 31, 1905, for construction of 65 miles of sewers and appurtenances, and for furnishing and laying 15 miles of cast-iron water mains and 4,000 ft. of railroad track. Sewers will range in size from 8 to 30 ins. and in depth from 5 to 18 ft., and will include 700 manholes and 275 flush-tanks. Water pipe will be mainly from 16 to 48 ins. in diameter, aggregating about 13,000 tons. Small quantities of 4 to 12-in. water pipe will also be required. Sewer work will be divided into four contracts: one for furnishing 48-in. cast-iron pipe and one for furnishing pipe smaller than this; also one contract for laying the 48-in. pipe and laying the railroad track, and one for laying water pipe smaller than 48-in. F. S. Shields, Secy. Sewerage and Water Bd., 602 Carondelet St. Geo. G. Earl is Gen. Supt. (Advertised, Engineering News.)

LEXINGTON, KY.—City at recent election voted affirmatively the $100,000 bond issue previously reported for the construction of sanitary sewer system; also $20,000 for building at Woodland Park. Thomas A. Combs is Mayor; J. E. Cassidy is Cy. Clk.

COVINGTON, KY.—It was voted on Nov. 8 to issue bonds for sewers. It is said that new sewers will be built in instalments during the next two or three seasons. W. E. Gunn is City Engr.

HAMILTON, O.—Bids are asked until noon, Dec. 2, for construction of a sewer in South D St. John B. Connaughton, Clk. Bd. Pub. Service.

DAYTON, O.—Bids are asked until Dec. 2 for constructing several miles sanitary pipe sewers. Louis Haas, Pres. Bd. Pub. Service.

TOLEDO, O.—Council has authorized a $250,000 bond issue, the proceeds to be applied to street improvements. Of this amount $40,000 is for sewers, and the remainder for paving work for the coming year. R. H. Finch, Mayor.

MARION, O.—County Commissioners have awarded to Price & Hurley the contract for the Blaine Ave. sewer at $17,500. The sewer will be 4,191 ft. long.

GRAND RAPIDS, MICH.—Louis W. Anderson, Cy. Engr., announces that cost of proposed septic tank now under consideration will be about $8,000. It is proposed to install it at the Michigan Soldiers' Home.

INDIANAPOLIS, IND.—Bids are reported to have been received by Board of Public Works on Nov. 11 for constructing about 23,000 ft. of sewer in Iowa St. Henry Maag was lowest bidder, at $2.58 per lin. ft. Total cost will be about $61,000.

SPRINGFIELD, ILL.—It is reported that about $6,000 will be used for constructing sewers by Board of Local Improvements, of which Ernest Shepherd is Pres.

JANESVILLE, WIS.—Bids are asked until Nov. 24 for constructing sewers, and laying water and gas sewer pipes. J. F. Hutchinson, City Clk.

BELLEPLAINE, IA.—The Iowa Engineering Co., of Clinton, Ia., has completed plans, we are informed, for a $60,000 sewer system for this place.

DUBUQUE, IA.—A sewer will be built in Lincoln St. It will total 2,885 lin. ft. of 10-in. tile pipe and 15 manholes. Plans by James H. Boyce, Cy. Engr. Charles F. Arendt is Cy. Recorder.

ST. PAUL, MINN.—A committee of the St. Anthony Park Improvement Association has conferred with A. R. Starkey, of City Engineer's Department, regarding completion of St. Anthony Park sewer system. Estimated cost is between $200,000 and $300,000. It is said that this amount cannot be raised at present.

OMAHA, NEB.—Sewer bonds were voted for at recent election.

ARKANSAS CITY, KAN.—Bids are asked by O. Ingersoll, Cy. Clk., until Dec. 6 for constructing sewer in sewer district No. 2.

PINE BLUFF, ARK.—Bids are asked until Dec. 15 for constructing about 24,000 ft. of 6, 8 and 10-in. pipe sewers. J. B. York, Chn. Comrs. Sewer Dist. No. 6.

LITTLE ROCK, ARK.—E. A. Kingsley, Cy. Engr., writes us that new sewer system is contemplated, but that no steps have been taken yet except general discussion on the needs, etc., of the city.

TEKOA, WASH.—Cost of proposed sewer system for this place is estimated at $7,000. Council has matter under consideration.

ABERDEEN, WASH.—Council has adopted plans for a $250,000 sewer system. A portion of the work will be started soon. Council has also adopted plans for a city hall. It will cost $20,000.

SEATTLE, WASH.—Fremont sewer plans have been accepted by Board Public Works. A large septic tank will be built.

ABERDEEN, WASH.—Council has accepted plans by Dunn, Cole & Dunn for the sewer system.

FRESNO, CAL.—I. Teilman, Cy. Engr., has presented plans for a storm sewer in Inyo St. Estimated cost, $1,800.

SEBASTOPOL, CAL.—Trustees have received estimates from Preston R. Davis for a complete sewer system in this city, to cost $12,000. His estimate for a water system, including a 50,000-gallon tank, mains, distributing pipes, etc., is $9,893.

SANTA CRUZ, CAL.—The estimated cost of the proposed East Santa Cruz drainage system is $15,000. It has been determined to raise this money by issuing 20-year bonds.

LOS GATOS, CAL.—An election will be held Dec. 5 to vote on $20,000 bridge bonds and $4,000 sewer bonds.

SANTA BARBARA, CAL.—City Council has decided to install a new main outfall sewer pipe. Cost, about $5,000. Work of laying a new 22-in. conduit under the ocean will be commenced soon.

SANTA CRUZ, CAL.—Bids are asked until 5 p. m., Nov. 28, for the construction of three concrete septic tanks to be built at the different points, as follows: One at the outlet of the Blaine St. sewer, one at the Garfield sewer, and one at the outlet of the Bixby St. sewer. J. L. Wright, Cy. Clk.

VACAVILLE, CAL.—See under Water-Works.

STREETS AND ROADS.

HAVERHILL, MASS.—Water St. will be widened and straightened to 60 ft. Robt. R. Evans is Cy. Engr.

HOLYOKE, MASS.—Board Public Works reported in favor of widening Northampton St. James L. Tighe is Cy. Engr.

LAWRENCE, MASS.—South Broadway will be widened to the full 66 ft. A. D. Narble is Cy. Engr.

ALEXANDRIA BAY, N. Y.—J. S. Keeler, Civ. Engr., City, is making survey for a boulevard to run from this place to Clayton, a distance of 12 miles.

ALBANY, N. Y.—It is reported that Board of Contract and Supply will award contract this winter for paving of South Pearl St. with block asphalt.

SYRACUSE, N. Y.—See under Electric Railways.

BUFFALO, N. Y.—Board of Supervisors of Erie County has awarded the contract for maintaining good roads in Erie County to H. P. Burgard for five years.

ENGLEWOOD, N. J.—An ordinance was adopted by Common Council for the grading of sidewalk on Dean St. Rort. Jamifson is Cy. Clk.

ATLANTIC CITY, N. J.—Ordinance providing for the improvement of Atlantic Ave. passed third reading before Council. The measure provides for a pavement of sheet asphaltum, with fire clay brick gutters and steel protected concrete curbing.

HARRISBURG, PA.—Bids are asked by State Highway Department until Dec. 3 for constructing 2,550 ft. of road in Germany Township, Adams County.

NEW CASTLE, PA.—Bids are asked by C. W. Fenton, Cy. Clk., until Nov. 28, 8 p. m., for grading Bleakley Ave. and Cherry St.; also for paving Sampson St.

PHILADELPHIA, PA.—Bids are asked by Edward Martin, Dir. Dept. Pub. Health and Charities, 395 City Hall, until Nov. 25, 11 a. m., for paving on certain streets.

BALTIMORE, MD.—Grove St. is to be paved with vitrified brick. Cost, $2,843.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

SALISBURY, MD.—Petitions for establishing four new roads in Wicomico County were granted by County Commissioners.

BALTIMORE, MD.—The regrading of Centre Market Space and adjoining streets will commence at once with the extension of West Falls Ave.

NORFOLK, VA.—An ordinance was adopted by the Councils by which $38,000 in bonds will be issued for the purpose of establishing a boulevard through Granby St. to City Park.

TROY, ALA.—Pike County has voted to issue $150,000 in bonds for the improvement of its public roads. County Clerk can give information.

NASHVILLE, TENN.—Belmont St. is to be widened.

HENDERSON, KY.—Bids are asked by J. H. Powell, Mayor, until Dec. 6 for construction of a brick sidewalk and grading and paving on Main St. Specifications on file in City Clerk's office.

TOLEDO, O.—A resolution declaring it necessary to improve Spielbusch Ave. and Cherry St. market space by paving was adopted by Council. Chas. H. Nauts is Clk. of Council.

HAMILTON, O.—Bids are asked by Board Public Service until Dec. 2 for grading, paving sidewalk with cement, etc., on South 13th St. John B. Connaughton, Clk.

DAYTON, O.—It is reported that bids will be received in the near future by City Clerk for paving of Wyoming St. Approximate quantities are as follows: 11,122 sq. yds. paving, 5,080 ft. straight curbing, 490 ft. stone headers, 266 ft. circular curbing.

SIDNEY, O.—The Council has passed ordinances to establish a grade on Michigan St., and declaring that the sidewalks shall be made to conform to the grade.

CINCINNATI, O.—Board Public Service has declared it necessary to improve Vine St. Est. cost, $4,077. Geo. F. Holmes is Clk.

ASHLAND, O.—Bids are asked by M. H. Kagey, Cy. Clk., until Dec. 1 for building sidewalks and crosswalks on Ohio and West Walnut Sts., according to plans by E. L. Barry, Engr.

YOUNGSTOWN, O.—Special assessments for paving Wilson Ave. and Watt St., and for construction of sidewalks on Wade St. and Poplar Ave. have all passed Council.

AKRON, O.—The ordinance authorizing Board Public Service to repair asphalt pavement on Howard St. has passed the Council. The Council has also decided to extend Figureoa St. and improve Conger Ave. and East Market St. R. F. Hamlin is Cy. Clk.

TOLEDO, O.—Bonds to the extent of $250,806 must be issued to cover the city's share of paving, grading and sewer work that is to be done next year, but for which legislation has already been started.

DAYTON, O.—An ordinance has been passed appropriating land for the purpose of opening and extending Sharple St. westward from Pulaski St. to Warren St.

TOLEDO, O.—The Council has passed ordinances to issue bonds for $2,003 for paving of Prouty Ave., and $53,-753 bonds for paving Front St.

MARION, IND.—The cemetery boulevard will be constructed by Center township. Cost, $24,425. It will consist of 2,552 ft. of roadway to be paved with brick.

INDIANAPOLIS, IND.—It is reported that bids will be received Nov. 28 by Board Public Works, for grading, graveling and rolling roadway on 32d St., and for grading Craven St.

BROWNSTOWN, IND.—Bids are asked until Dec. 5 by County Commissioners for ditching, tiling, bridging, graveling or macadamizing Sitterding School House Road on line dividing Brownstown and Washington Townships; in all about 3 miles. Asbury H. Manuel, County Audr.

INDIANAPOLIS, IND.—The Board Public Works will soon ask for bids for improving several streets by grading, paving and laying new sidewalks.

GRAND RAPIDS, MICH.—Some important street improvements will probably be undertaken next season in Third Ward.

STERLING, ILL.—An ordinance was passed by City Council authorizing the Mayor to issue $5,000 bonds for the improvement of various streets.

CHICAGO, ILL.—The West Park Commissioners have voted to take over Sacramento Ave., from West 12th St to Franklin Square, a distance of a mile and a half, to convert it into a boulevard.

DES MOINES, IA.—An ordinance has been presented to Council providing for change of grade on West 17th St.

ST. PAUL, MINN.—The Barber Asphalt Paving Co. was awarded contract by Board Public Works for paving Fort St. for $13,940. Work will be commenced at once.

HUTCHISON, KAN.—An ordinance providing for the paving of Adams St. was passed by Council. S. F. Johnson is Cy. Clk.

SPRINGFIELD, MO.—A resolution declaring it necessary to improve Campbell St. by paving with brick was approved by Council. G. W. Hackney is Cy. Clk.

ST. LOUIS, MO.—Improvements bills for the paving of the following streets were passed by House of Delegates: Wisconsin Ave., asphalt; Greenlea Place, asphalt; Bartmer Ave., asphalt; Shawnee Ave., vitrified brick; Potomac St., vitrified brick; Virginia Ave., asphalt; Michigan Ave., asphalt; Burd Ave., asphalt; Lucky St., vitrified brick, and Evans Ave., asphalt. Hiram Phillips is Pres. Bd. Pub. Wks.

GALVESTON, TEX.—The city will advertise for bids for paving 13 blocks with vitrified brick. Address V. E. Austin, Comr. Streets and Pub. Imp.

VANCOUVER BARRACKS, WASH.—Bids are asked by Constructing Quartermaster until Dec. 7 for laying cement sidewalks at the post.

BERKELEY, CAL.—The Northlands Development Co. has secured tract of 30 acres at Berkeley and will grade and macadamize at once. Francis Ferrier is Pres.; C. L. Huggins is Cy. Engr.

OAKLAND, CAL.—An ordinance was passed by Council appropriating $15,000 to macadamize the extension of Harrison St.

MANUFACTURING PLANTS.

TONAWANDA, N. Y.—The L. M. Ericson Telephone Co., City, has bought a site on Military Road for its plant.

WATERLOO, N. Y.—An enlargement of the woolen mills here is projected and more buildings will be added so that present output can be doubled. Plans are now being drawn.

McKEESPORT, PA.—The McKeesport Ice Co. will rebuild its plant. Robt. Taylor, City, is Secy.

HUNTINGTON, PA.—The Huntington Silk Co. has been incorporated with a capital of $150,000.

PHILADELPHIA, PA.—The Standard Roller Bearing Co., City, has purchased a strip of land, 25 × 100 ft., facing main line of Pennsylvania Railroad at Girard Ave. and 48th St., and also a tract of land, 200 × 300 ft., adjoining its factory. Upon this property will be erected a steel casting plant, and an addition to foundry, also a large addition to factory, for making steel balls. All the machinery has not yet been secured. S. S. Eveland, Mgr., is in charge of improvements.

CONSHOHOCKEN, PA.—Savery, Sheetz & Savery, Archs., Stephen Girard Bldg., Philadelphia, have invited bids for a factory at this place for John Wood Mfg. Co. Brick, 1 story, 125 × 50 ft.

BRISTOL, PA.—Seymour & Paul A. Davis, Archs., 907 Walnut St., Philadelphia, are preparing plans for an addition to a carpet mill for Wm. H. Grundy & Co. Brick, 1 story, 40 × 120 ft.

WASHINGTON, D. C.—John L. Schaffer, 427 I St., N. W., has been awarded the contract for a three-story bakery and warehouse at First and F Sts.

WILMINGTON, N. C.—The Waccamaw Land & Lumber Co. has purchased the Chadburn Lumber Co. here, and will at once enlarge the plant to about three times its present size. It is also understood that the company will also erect another new mill near here. Frank H. Wheeler is Pres.

PENELO, N. C.—W. R. Cox will rebuild his cotton gin burned recently. He will also put in a sawmill and grist mill in the near future.

COLUMBIA, S. C.—The Columbia Coca-Cola Bottling Works will erect a two-story brick factory building. H. D. Crosswell is Mgr.

SPARTANBURG, S. C.—The Jordan Mfg. Co., capital $20,000, has been chartered here by S. V. Muckenfuss, of Spartanburg, and G. E. Rodgers, of Charleston, to manufacture cotton and woolen goods.

NORTH AUGUSTA, S. C.—Plans for Davis cotton mill to be built here have been prepared by T. B. Hitchcock & Co., of Columbia. Contracts for construction will be closed this month. A part of the machinery contracts have already been closed.

SAVANNAH, GA.—The Knickerbocker Ice Co. will erect a cold storage plant in this city. Machinery has been purchased. R. L. M. Parks is Mgr.

MACON, GA.—G. Bernd & Co. will erect a large tannery here.

ACKWORTH, GA.—About $35,000 of the necessary $50,000 has been subscribed for the proposed Ackworth Cotton Yarn Mill here. A 5,000-spindle plant is planned by the company of which Orlando Autrey is temporary president. Machinery will not be bought until spring.

LA GRANGE, GA.—The La Grange Mills will rebuild their oil mills, recently burned, next summer.

LAWRENCEVILLE, GA.—The Lawrenceville Bottling Works will erect a new factory building. W. H. Hutchins is Mgr.

ATLANTA, GA.—The Atlanta Ice & Coal Co. will rebuild their building recently damaged. Cost, $4,000.

BRUNSWICK, GA.—The Hoskins-Burton Timber Co., capital $50,000, has been chartered to do a general timber and lumber business. J. T. Colson can give information.

TAMPA, FLA.—The Tampa Tile & Granolithic Co. will add a roofing department to their business and are in the market for roofing tools and materials; want information and prices on all kinds of roofing tools, kettles, paper, asphalt, pitch, etc.

LAKE HELEN, FLA.—The E. W. Bond Co. will erect a stave mill for the manufacture of barrel materials.

JACKSONVILLE, FLA.—B. W. Berry, of Monticello, will establish a wagon factory here.

JACKSONVILLE, FLA.—The Florida Packing Co., capital $100,000, will erect a packing plant in this city. Francis P. Conroy, president; Chas. E. Smith, secretary; R. J. Embleton, treasurer.

PITTSBORO, MISS.—The Pittsboro Spoke Mfg. Co. has been chartered here with $10,000 cap. stock.

SHREVEPORT, LA.—It is reported that Armour & Co., of Chicago, will erect a fertilizer plant here.

LOCKPORT, LA.—Sturgeon S. Fair, of Osceola, Ark., has purchased swamps of Ludivine plantation, owned by Mrs. F. Foret & Sons, and will erect there a sawmill plant of large capacity.

NEW ORLEANS, LA.—The North Louisiana Cotton Planting Co., capital $300,000, has been incorporated to develop cotton lands in Louisiana, to construct and operate sawmills and other mills, factories or plants for handling lumber and other products of the forest or soil; to construct, operate irrigating and drainage plants, etc. The incorporators are W. W. Girault and others.

LENOIR, TENN.—It is stated that Halston Mfg. Co. has been organized to erect a 10,000-spindle cotton mill here, with a capital of $250,000. F. A. Weiss is Mgr.

LEXINGTON, KY.—The Burley Loose Tobacco Warehouse Co. will erect a tobacco drying plant, with a capacity for drying 6,000 lbs. of tobacco per hour.

YOUNGSTOWN, O.—Ralph Prall is engineer in charge of the erection of mills which the Republic Iron & Steel Co. will build here.

SPRINGFIELD, O.—Shops to cost about $100,000 are to be built here by Detroit Southern. The business men have pledged $60,000 for the purchase of a site. Geo. Crocker, City, is Ch. Engr.

LORAIN, O.—The American Shipbuilding Co. has purchased 22 acres of land, and will build extensive additions to their plant in this city.

WARREN, O.—The foundry and machine shops of Day, Ward & Co. were destroyed by fire. Loss, $20,000.

YOUNGSTOWN, O.—The Bauman Ice Cream Co. will erect a plant. Electric power plant, artesian well supply, gas engines and two 10-ton ice machines will be installed. Arthur Bauman is Mgr.

MILWAUKEE, WIS.—The Cutler-Hammer Mfg. Co. is planning to erect a $30,000 addition to its plant at 12th St. and St. Paul Ave.

ST. LOUIS, MO.—The Hamilton Brown Shoe Co. will erect a new eight-story factory building at a cost of $128,000. Isaac Taylor is Arch. The Murch Bros. Construction Co., contractors.

DALLAS, TEX.—J. F. Zang, owner of Crystal Hill, which contains deposits of glass sand, is planning to organize a company to build a glass factory here.

HOUSTON, TEX.—The Otis Elevator Co. contemplates erecting an extensive factory in this city. The Mayor can give information.

GREENVILLE, TEX.—The Planters' Compress & Elevator Co. will erect an elevator and warehouse at a cost of betwen $15,000 and $20,000.

TEMPLE, TEX.—The Werkheiser-Polk Mill & Elevator Co. will increase its capital from $35,000 to $70,000.

HILLSBORO, TEX.—The Hillsboro Cotton Mills has incorporated with $90,000 cap. stock and its object is to build and operate a cotton mill. The incorporators are: J. O. Moore, T. T. Tomlinson, A. B. Smith and others, all of Hillsboro.

DALLAS, TEX.—The Emerson Mfg. Co. will erect a five-story brick annex to their factory.

GALVESTON, TEX.—Harris S. Cotten & Co. will erect a corn drying plant at a cost of $15,000.

EL PASO, TEX.—J. F. Tibbett, of Riverside, Cal., representing California capital and also glass works at Joliet and Ottawa, Ill., has written to Chamber of Commerce here stating they will erect a paint and glass factory to cost about $200,000.

FORT WORTH, TEX.—The new 1,000-barrel flouring mill to be erected here for this season's crop, at a cost of $150,000, will be built by same interests that own Collin County Mills at McKinney and New Century Mill at Dallas. The new company is the Burrus Mill & Elevator Co., capital stock $200,000. Among the incorporators are J. Perry Burrus, of McKinney; J. L. White, L. A. Scott and E. W. Morten, Jr.

SEATTLE, WASH.—Negotiations are pending which will mean the establishment in Seattle of a Portland cement factory to cost $600,000. Everything has been definitely settled except the site for the plant. It is understood that W. W. Butler, City, and H. Miller, of Detroit, Mich., is interested.

ST. JOHN'S, N. F.—Henry M. Whitney, of Boston, Pres., Newfoundland Timber Estates Co., has transferred to Sir Alfred Harmsworth & Bros., London publishers, lumber areas here on which the Harmsworths purpose establishing large pulp mills. $2,000,000 will be spent next year in erecting pulp mills.

GUELPH, ONT.—Robt. Stewart, Ltd., contemplates enlarging, planing mill and installing additional machinery and a dry kiln.

MISCELLANEOUS CONTRACTS.

RIVER IMPROVEMENT.—Ottuma, Ia.—This city has voted in favor of improving south bank of Des Moines River.

WHARF.—Stokes Bay, Ont.—Kasmer & Porter were successful bidders for construction of wharf here to cost about $9,000.

PIER.—Boston, Mass.—The London pier and shed of the Warren Line, in Charlestown, was destroyed by fire Nov. 17, with a loss of $600,000.

DITCH.—Monticello, Ind.—Bids are asked by J. M. Shafer, Drainage Comr., until Nov. 29 for construction of McClure ditch in White County.

DRAINAGE SYSTEM.—Santa Cruz, Cal.—$15,000 bond issue is to be made, according to reports, for putting in drainage system in East Santa Cruz.

STEAMSHIP.—Seattle, Wash.—Alaska Pacific Navigation Co., Capt. E. E. Carrie, Pres., will have a $225,000 steamship built, according to reports.

CREEK IMPROVEMENT.—Syracuse, N. Y.—H. T. Beach, Asst. Cy Engr., is stated to have completed plans for proposed Onondaga Creek Improvement.

LEVEE.—Marion, Ind.—Plans and specifications of T. E. Petrie, Cy. Engr., for the Johnstown levee have been adopted by Council. Est. cost of work is $4,010.

COALING WHARF.—Savannah, Ga.—Bids are asked until Dec. 16 for construction of a coaling wharf in Savannah Harbor. Lt.-Col. Jas. B. Quinn, U. S. Engrs.

DREDGE WORK.—Kenton, O.—About $25,000 worth of dredge work will be let about Dec. 1. Further information may be obtained from J. W. Gilmore, County Surveyor, Kenton.

DREDGING.—Cleveland, O.—Board Public Service is stated to have awarded contract for dredging at foot of Erie St. to Detroit Dredging Co. Total estimated cost is $13,000.

WIRE SCREENS.—Washington, D. C.—Bids are asked by Isthmian Canal Commission, J. G. Walker, Chn., until Dec. 16 for furnishing wire screens for Ancon Hospital buildings.

TELEPHONE FRANCHISE.—Estherville, Ia.—Citizens of Emmet County have voted to grant franchise here to Emmet County Telephone Co., which is made up of local capitalists.

CITY IMPROVEMENTS.—St. Louis, Mo.—Ordinance has been before Council to submit a proposition for a $9,000,000 bond issue for city improvements to the citizens at spring election.

QUARRY STRIPPING.—McDermott, O.—Bids are wanted by the McDermott Stone Co., McDermott, for 20,000 cu. yds. of quarry stripping. (Advertised, Engineering News.)

DOCK.—Syracuse, N. Y.—Syracuse & South Bay R. R. Co., W. R. Kimball, Gen. Mgr., according to reports, will build a dock at South Bay next spring as a terminal for its trolley line.

NAILS AND LANTERNS.—New York, N. Y.—Bids are asked until 12 a. m., Nov. 25, for furnishing nails and lanterns. Major G. S. Bingham, Q. M. U. S. A., Army Bldg., New York.

WALL LOCKERS.—Prescott, Ariz.—The bids received by Chas. C. Walcutt, Jr., C. Q. M., U. S. A., Whipple Barracks, Nov. 16 for furnishing wall lockers are given under Contract Prices.

FERRY TERMINALS.—Jacksonville, Fla.—Jacksonville Ferry Co. is having plans prepared for its recreation pier and waiting rooms to be built at foot of Main St. J. M. Barrs is interested.

DREDGING, ETC.—Sandusky, O.—Cedar Point Pleasure Co., Sandusky, has let contract to Detroit Dredging Co. for $20,000 worth of improvements to its pleasure grounds near here.

TELEPHONE SYSTEM.—Pendleton, Ore.—Birch Creek Mutual Telephone Co. has applied for franchise to install complete system in this city. A. J. Southwell and M. L. Warren are interested.

DREDGING.—New York, N. Y.—Bids are asked by Maurice Featherson, Comr. Docks, Pier "A," Battery Pl., until Nov. 29 for about 24,000 cu. yds. dredging at Chelsea Section, North River.

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DREDGING.—Cleveland, O.—Board Publ[illegible] is stated to have let contract for dredging, [illegible] expenditure of about $25,000, to L. P. & J. [illegible] Co., Williamson Bldg., Cleveland.

LUMBER.—Washington, D. C.—Bids a[illegible] by Isthmian Canal Commission, J. G. Walker [illegible] until Dec. 17 for furnishing red cypress or red [illegible] lumber and yellow pine or Douglass fir.

FIRE ENGINES, FIRE-ALARM TELE[illegible] Toronto, Ont.—By-law is to be voted on Jan. 1 [illegible] $16,500 for three new fire engines and $35,[illegible] office fire-alarm telegraph system.

DRAFTING MATERIALS, ETC.—Washing[illegible] Bids are asked by Isthmian Canal Comm[illegible] G. Walker, Chn., until Dec. 27 for furnishing a [illegible] of draftsmen and engineers' materials.

DREDGING.—New York, N. Y.—Bids are [illegible] by Maurice Featherson, Comr. of Docks, Pier "A[illegible] Pl., until Nov. 30 for labor and material fo[illegible] about 500,000 cu. yds. from the North River.

SUBWAY.—Scranton, Pa.—Advices from this [illegible] that it is possible that the Lackawanna & Wyo[illegible] ley R. R. will make a connection with the [illegible] & Western R. R. by means of a subway undern[illegible] city.

SURF BOATS.—Washington, D. C.—Bids are [illegible] by U. S. Life-Saving Service, S. I. Kimball, Ge[illegible] until Nov. 29 for construction of ten 27-ft. su[illegible] with centerboard and sails, to be delivered f. o. b. [illegible] land, Me.

TELEPHONE SYSTEM.—Gardiner, Me.—W[illegible] and Telephone Co. has been chartered to do business [illegible] West Gardiner, Manchester, Litchfield, Farmingdale, G[illegible] Hallowell and Augusta. H. E. Emery, Manchest[illegible] Me., is interested.

DITCH.—Marion, Ind.—Bids are asked by Grant County Commissioners until Nov. 29 for construction of [illegible] ditch in Van Buren Township and Owl Creek d[illegible] in Richland Township. Plans and specifications are on file with County Auditor.

DITCHES.—Delphi, Ind.—Carroll County Commissioners are reported to be preparing to receive bids for constructing drain in Deer Creek Township. The Commissioners also have approved report of viewers for a ditch in Madison Township.

MONUMENTS.—Wilmington, N. C.—Plans and specifications for construction of monuments to Generals Nash and Davidson are on file at office of Engineering News, 220 Broadway, New York. Bids are asked until Dec. 12, as advertised in Engineering News.

DRAINAGE WORK.—Des Moines, Ia.—State Executive Council has ordered the drainage of Island Lake in Hamilton County, Rat and Swan Lakes in Pocahontas County, and Sand Hill Lake in Woodbury County. The beds of the lakes will be sold for farm lands.

RIPRAP.—Boston, Mass.—State Harbor and Land Commissioners, Woodward Emery, Chn., are reported to be asking bids until Dec. 1 for furnishing about 1,000 tons of stone riprap and depositing same along outer portions of eastern jetty at mouth of Bass River.

STACK WORK.—New York, N. Y.—Contract for stack work at the New York Public Library has been let to Snead & Co. Iron Works, Jersey City, N. J., for $916,703. The specifications for the stacks include the iron work structure and about 80 miles of shelves.

TUNNEL.—Washington, D. C.—The Chief Engineer, Reclamation Service, U. S. Geological Survey, is taking bids until Jan. 9 for the construction of an outlet tunnel for the Pathfinder Dam, southwest of Casper, Wyo., as is stated in our advertising columns.

FUEL OIL, ETC.—Phoenix, Ariz.—Bids are asked at office of U. S. Reclamation Service, Phoenix, until Jan. 5 for delivery of 50,000 bbls., more or less, of fuel oil at Mesa or Roosevelt, Ariz., and for hauling miscellaneous freight. (Advertised, Engineering News.)

OIL PIPE LINE.—Jennings, La.—Details are nearing completion, it is stated, for building a 92 mile long pipe line from Jennings to the Mississippi River. There are to by ten pumping stations. O. W. Heywood and L. A. Beckenstein, Jennings, are reported interested.

SUBWAY.—Boston, Mass.—Bids were received by the Boston Transit Commission Nov. 17 for constructing Sec. 2 of Washington St. subway and contract was let to Patrick McGovern, 6 Beacon St., Boston, for $114,914. Itemized bids are given under Contract Prices.

PUMPING PLANT.—San Francisco, Cal.—The contracts for a permanent pumping plant to drain the group of middle mines upon the Comstock lode to a vertical depth of 3,000 ft. has been let to the International Steam Pump Co., New York, and the Westinghouse Electric & Mfg. Co., Pittsburg, Pa.

BOILER HOUSE EXTENSION, ETC.—New York, N. Y.—Bids are asked by Francis J. Lantry, Comr. of Correction, until Dec. 15 for erection and completion of an extension to the present boiler house, new underground chimney connection, trench from new to old boiler house, etc., to branch workhouse, Hart's Island.

EARTH SPREADERS.—Washington, D. C.—Bids are asked by Isthmian Canal Commission, J. G. Walker, Chn., until Nov. 30 for furnishing three earth spreaders for use on the Isthmus of Panama. Bidding sheet, giving description of machines required, is on file at office of Engineering News, 220 Broadway, New York.

MASON WORK.—Buffalo, N. Y.—Following bids were received Nov. 16 for mason work in connection with the boiler of the new 65th Regiment Armory; all Buffalo bidders: Mosier & Summers, 1260 Seneca St., $6,632. William Schumaker, 154 Dodge St., $6,800. Queen City Construction Co., 207 Mutual Life Bldg., $7,142.

PORTLAND CEMENT.—Washington, D. C.—Bureau of Engineering, Government of the Philippine Islands, is asking bids until Dec. 31 for 30,000 bbls. Portland cement to be employed in the improvement of the Port of Cebú, Philippines. Delivery must be begun at Cebú on or before Feb. 15. Col. Clarence R. Edwards, U. S. Army, Ch. Bu. Insular Affairs, Washington, D. C.

RETAINING WALL.—Washington, D. C.—Following bids were received by Bureau Yards and Dock Nov. 19 for continuation of retaining wall about reserve basin, Navy Yard, League Island, Pa.: American Paving & Construction Co., Philadelphia, Pa., $92,900; Snare & Triest Co., New York, $101,900; Edward F. Fonder Co., Philadelphia, Pa., $104,568; Sundstrom & Stratton, New York, $108,795.

UNLOADING MACHINES AND PLOWS.—Washington, D. C.—Bids are asked by Isthmian Canal Commission, J. G. Walker, Chn., until Nov. 30 for furnishing for use on Isthmus of Panama, three unloading machines and three unloading plows, delivered and erected on the Isthmus. Bidding sheet, giving description of machines required, is on file at office of Engineering News, 220 Broadway, New York.

RIVER AND HARBOR WORK.—Washington, D. C.—According to report of Chief of Engineers, U. S. Army, to Secretary of War, the estimates ensuing fiscal year for river and harbor work are as follows: Under continuing contracts, $8,442,396; rivers and harbor (general), $21,444,257; examinations, surveys and contingencies, $300,000; prevention of deposits in New York Harbor, $85,260; enlargement of Governor's Island, New York, $100,000.

DRAINAGE CANAL.—Bloomington, Ill.—We are informed that projected drainage canal to carry off flood waters of Marias des Sygnes River is as yet in only a preliminary state, and contracts will not be let very soon, as no work will be done on the project before next summer. The enterprise will probably cost land owners about $10 per acre. The work on the Green River, however, will be ready to advertise soon. A. H. Bell, C. E., Bloomington, Ill., is Engr.

WHARF SHED.—New Orleans, La.—It is stated that the Port Commissioners will have a $75,000 steel wharf shed erected as soon as the Toulouse St. wharf is rebuilt. Contract for rebuilding the wharf, which will cost about $700,000, was let to J. H. Gardner Construction Co., and work on it has already been started. Plans and specifications for the steel wharf shed are reported to have been completed by John F. Coleman, Engr. Port Comrs., Hennen Bldg., New Orleans.

AIR COMPRESSORS.—Washington, D. C.—Following bids were received Nov. 15 by Bureau Supplies and Accounts for air compressors for use in the Navy: E. W. Bliss Co., 17 Adams St., Brooklyn, N. Y., $48,000. George F. Blake Mfg. Co., 114 Liberty St., New York, $48,500 Ingersoll-Sergeant Drill Co., 26 Cortlandt St., New York, $59,400. Rand Drill Co., 128 Broadway, New York, $60,000 and $54,000. Platt Iron Works Co., Dayton, O., $41,400, if five or more are ordered.

DRAINAGE DITCH.—Macon, Mo.—W. G. Walker, of Walker Bros., is in charge of surveys for a drainage district and it is proposed to cut a ditch which will become the main channel of the river running through the district. This ditch, in connection with improvements below (in charge of M. T. O. Stanley, of Sedalia, Mo.), will be 40 to 45 miles in length and will require the removal of about 500,000 cu. yds. of earth. It will have for the most part a bottom width of 20 ft., side slopes 1 to 1, an average depth of 10 ft. and about 300 sq. ft. cross-sectional area. Some parts may be made 10 ft. wide and 13 ft. deep, 8 × 14 ft., or 14 × 12 ft. Mr. Walker wants correspondence with contractors for ditch work and builders of ditching dredges.

NAVAL SUPPLIES.—Washington, D. C.—Bids are asked by Bureau Supplies and Accounts, Navy Department, until Dec. 6 for furnishing naval supplies at New York Navy Yard. Among the articles desired are searchlight projectors and tool boxes; electric fans, electric blowers, annunciators, mica, whistle operators, transmitters, indicators, warning signals, iron service cut-out, duplex rubber-covered wire, magnet wire, cable, gongs, brass tubing, arc lamps, globes, tachometer, Crosby's new indicators, reducing wheel, Amster planimeter, Rockland-Rockport lime, brick, sand, rivets, cap screws, saws, "Little Giant" hand stocks, bolts, tube expanders, pipe expanders, kettle ears, clamps, clinch rings, taps, twist drills, wire, door sheaves, miter gears for "Little Giant" attachment, spare parts for "Little Giant" air drills, spare parts for "Boyer" pneumatic hammers, "Bowser" oil tanks, grommets, spare parts for "Keller" pneumatic hammer, parts for "Babcock & Wilcox" boiler, ammunition trolley blocks, punches, "Union" scale, miscellaneous hardware and hand tools, hammock rings, boat stoves, water coolers and filters, emery wheels, carborundum wheels, copper, American drill rods, charcoal iron, Russia iron, mild steel rod and bar, galvanized sheet iron or steel; galvanized steel angles, channel and T bars, galvanized band iron or steel, solder; suction hose, steam hose, cast and wrought iron pipe, brass pipe, copper pipe, steel tubing, "Leslie" "Jenkins" and "Libby" valves, gages, ejectors, engine revolution indicators, copper balls, "McCreery" elbows. H. T. B. Harris, Pay M. Gen., U. S. N.

CANAL IMPROVEMENT.—Albany, N. Y.—Bids are asked by Charles S. Boyd, Supt. Pub. Wks., until Dec. 15 for Contracts Nos. 1 and 2, until Dec. 16 for Contracts Nos. 3 and 4, and until Dec. 17 for Contracts Nos. 5 and 6, for the improvement of New York State Canals. Contract No. 1, Champlain Canal, River Line, covers excavating river channel from Northumberland to Fort Miller and from Crockers Reef to Fort Edward, construction of Crockers Reef dam, approaches to head and foot of The Land Line and other incidental work. Contract No. 2, Erie Canal, Sec. 1, covers the excavation and protection of the sides of the Erie Canal from the Mohawk River to point about ¼ mile west of head of lock No. 3, construction of locks Nos. 2 and 3 with approaches and appertaining parts. Contract No. 3, Champlain Canal, Land Line, covers excavation of canal and protection of its banks from Sta. 147 + 75 to Sta. 262 + 00, construction of Fort Miller lock and its approaches, bridge abutments and foundations at Sta. 151 + 60, Sta. 173 + 18, Sta. 213 + 46, and Sta. 247 + 50, removal and re-erection of present bridge at East St., change of location of old Champlain Canal and all other incidental work. Contract No. 4, Erie Canal, Section 5, covers construction of canal and its appurtenances from foot of lock 25 to deep water, east end of Oneida Lake at Sylvan Beach, and will be about 4.83 miles long. Contract No. 5, Erie Canal, Section 7, covers construction of canal and its appurtenances from Sta. 5074, near Mosquito Point Bridge to Sta. 5373, east of Savannah; length, 5.66 miles. Contract No. 6, Erie Canal, Section 9, covers excavation of canal from Sta. 2571, just south of Buffalo Road, west of Rochester, to Sta. 2744, near South Greece, and protection of its banks; construction of foundations and abutments for bridges and road and incidental work. The above work is advertised in Engineering News.

MINING NOTES.

MILL.—Bakersfield, Cal.—Local reports state that it is reported that J. J. Mack and associates have bought the Old Amalie and the Barbarolis mines and will probably erect an up-to-date mill.

STAMP MILL, ETC.—Mokelumne Hill, Cal.—Local reports state that J. E. King, who is working the Hamby mine, will install a new hoist and a 20-stamp mill. The shaft is to be sunk 1,000 ft.

STAMP MILL.—Deadwood, S. Dak.—Lucky Strike Gold Mining Co., A. L. Harris, Pres., Reedsburg, Wis., according to reports, is to erect a 60-stamp mill at its mine on the Homestead Belt south of this city.

MACHINERY.—Randsburg, Cal.—Advices from this city state that the Yellow Aster Mining & Milling Co. contemplates new improvements with additional machinery, which will increase capacity of their mills.

DEVELOPMENT WORK.—Beulah, Wyo.—At a recent meeting of the Clover Leaf Mining Co., held here, it was voted to issue $250,000 of bonds. The company is about to sink its shaft from the 500-ft. level to the 1,000-ft. level and this will, it is expected, open a vast quantity of high-grade ore.

REDUCTION PLANTS, ETC.—Prescott, Ariz.—Rigby Mining & Reduction Co. is stated to have issued $200,000 of bonds, the proceeds of which are to be used in operating its reduction plant at Meyer and in the erection of similar plants.

TUNNEL.—Baker City, Ore.—Advices from this city state that Warren Cable has been appointed manager of the consolidated Montezuma and Baisley-Elkhorn mines and that it is reported that the company intends to run a 1,200-ft. tunnel this winter.

MINING DREDGE, ETC.—Seattle, Wash.—The Seattle Prospecting & Developing Co., R. J. Stahman, Secy., is stated to be planning for development work on McDames Creek, in the Cassiar mining district, and expects to buy a $10,000 dredge and other machinery in the spring.

MINING EQUIPMENT.—Salt Lake City, Utah.—According to advices from this city the following mining development work is projected: The Farmington Gold & Copper Mining & Milling Co., of Paris, will equip its Utah mines with air compressor and drills. Fred. E. Perkins, Salt Lake City, is Mgr.——Reuben DeWitt, Marysville, Utah, will equip his Out-of-Sight mine with steam hoisting works.——A hoist and mill will be built for the Smith Point mine of A. N. Buchanan, Loomis, Cal., according to reports.——George E. Hogg, of Downieville, Cal., will build a mill in the spring for his Oakland mine in Plumas County, California.——It is reported that W. H. Cleary, Murphy, Cal., will erect a 10-stamp mill for his mine.——It is stated that the Springfield Mining Co., Olinghouse, Nev., J. D. Poole, Supt., will soon add to its milling equipment.——Gregory & Co., San Francisco, Cal., have purchased the Santa Monica mine near Nevada City, Cal., and will build a mill in the spring.——F. L. Howard, of Ballarat, Cal., contemplates the installation of a stamp mill for his Star mine.——The Republican Mining Company, Ballarat, Cal., G. E. Little, Supt., will build a stamp mill for his mine, it is stated.——The Romestake mine at Silver Peak, Nev., C. McCarthy, Supt., will build a 5-stamp mill and cyanide annex.

U. S. POSSESSIONS AND CUBA.

GAS WORKS AND MAINS.—Hawaii.—Honolulu Gas Co., according to local advices, has two sites under consideration for its gas works, and was to call for bids soon for laying between 12 and 15 miles of mains.

HARBOR IMPROVEMENTS.—Philippines.—The U. S. Government has just purchased 27 Imperial pneumatic hammers and drills from the Rand Drill Co., to be used in connection with the Manila Harbor improvements.

TELEPHONE EXTENSIONS.—Alaska.—The Alaska Telephone & Telegraph Co. has taken over the Nome Telephone system and the Boyd Long Distance Telephone line, and a number of extensions will be built. A. E. Boyd is Mgr.

PORTLAND CEMENT.—Philippines.—Bureau of Engineering, Col. Clarence R. Edwards, U. S. Army, Ch. Bu. Insular Affairs, is asking bids until Dec. 31, as is stated under Miscellaneous Contracts, for 30,000 bbls. Portland cement to be employed in the improvement of the Port of Cebú, Philippine Islands.

MEXICO.

RAILWAYS.

AGOSTITLAN.—The Agostitlan Coal Co., Ltd., which is building a narrow gage railroad from Irimso Station on the National R. R. to Agostitlan, a distance of 48 kilometers, is stated to have completed about 30 kilometers of grading. Alfredo Stoeffle, a Wall St. broker of New York, is reported as at the head of the enterprise.

CITY OF MEXICO.—Luis Garcia Tereul has been granted an extension of time until 1907 to complete the Tlacolula R. R. This line is located from Oaxaca to San Dionisio, with a branch to Mitla, in the state of Oaxaca.

A. J. Payton has been granted an extension until 1910 to complete the road from Irapuato to Ario, a point in the western part of the state of Michoacan.

OAXACA.—The government has granted an extension of time to Wenceslao Gracia, concessionaire of the railway from Oaxaca to Tlacolula for the construction of the road. As now arranged the first ten kilometers must be finished by Sept. 1, 1905, another ten kilometers within the following year, and the rest of the road completed by Sept. 1, 1907.

TUXPAN.—It is stated that the Mexican Central Ry. will resume work early next year on the extension from Tuxpan to Colima, provided additional funds can be secured abroad. L. Kingman, City of Mexico, is Ch. Engr.

STREET AND ELECTRIC RAILWAYS.

AGUASCALIENTES.—Aguascalientes Street Ry. Co., John Douglas, Pres., according to reports, is to construct six more miles of street railway and place it in operation by April 1, 1905. Portions of the old mule car line are to be converted into standard gage electric track, and some of the mule cars will be equipped with motors.

LIGHT AND POWER PLANTS.

CITY OF MEXICO.—The great opportunities that exist in this country for the establishment of cheap power plants is set forth in a report which Brigadier-General Angel Garcia Pena, Chief of the Geological Exploration Commission of the Federal Government, has just made to the Department of Encouragement and Statistics. He and the other members of the commission made an exhaustive investigation of the available water power in the republic and their estimate places it at 1,500 000 HP.

CULIACAN, SONORA.—An American company represented by Sydney Sprout, is endeavoring to secure the contract for furnishing electric light to this city. The company, which is composed of Chicago parties, is capitalized at $50,000, and it is stated that if they secure the concession, they will establish electric street car system.

SALAMANCA, GUANAJUATO.—Project to install an electric light plant in this city is being taken up again. The matter was dropped, some time ago, because of difficulties encountered.

BUILDINGS.

CHIHUAHUA.—Acting Governor Enrique Creel has offered to donate necessary land for an experimental station to be operated in connection with an agricultural college which may be established here.

CITY OF MEXICO.—The Mexican government is considering plans for the extensive enlargement and improvement of the agricultural college here.

Hotel & Development Co., of Mexico, has been formed to establish eating houses along the lines of the several Mexican railways and to operate hotels in the principal cities and health resorts of Mexico. The capital, it is stated, will be $1,000 000. Carlos Revas, H. L. Hall and W. B. Murray, City of Mexico, are interested.

The Sanz hotel in the City of Mexico, it is reported, is to be enlarged by the addition of two stories, by which its capacity will be more than doubled. The building is owned by the Sanz estate, and is under lease to H. L. Hall.

Gardiner H. Shaw, of San Francisco, Cal., is reported to be promoting the erection of a new hotel building in this city to cost about $1,000,000.

Department of Fomento has received plans for the observatory to be erected in the San Rafael Colony.

Department of Interior is considering the construction of a new and modern jail, to replace the old jail of Belem, in this city. It will be of four times the capacity of Belem, and in accordance with the most modern plans.

COLIMA.—The contract for the construction of an all-steel market house at this place has been awarded by Governor Madrid to Ugarte & Fuentes, of Guadalajara. The proposed building will cost about $60,000.

MERIDA, YUCATAN.—The state legislature has appropriated $2,644,000, of which amount about $1,500,000 is to be expended in this city for public improvements of various kinds and $300,000 for the construction of new public school buildings and extending the work of education throughout the state. The remainder of the appropriation is for meeting the expenses of the state government.

TAMPICO.—The Mexican-American Steamship Company, which operates between Galveston, Tex., and Tampico, intends to erect hotels in the latter city to accommodate tourists. A. L. Roby is Gen. Mgr.

WATER-WORKS.

CHIHUAHUA.—Agriculurists of San Felipe, in the Arteaga District, Chihuahua, are raising funds for construction of a dam in the La Vigueña Valley to cost about $60,000, and which is to be used to store water for irrigation purposes.

CITY OF MEXICO.—Application has been made by David Reyes Retana of this city for a concession to erect the works requisite to use 60,000 liters of water from the Mescala or Balsas River, state of Guerrero, for irrigation and hydraulic power, from a point where the Poliutlo River enters, to another point 50 kilometers distant.

Jesus Valderrain has applied to Mexican Government for permission to utilize water of Mago River, in Sonora, for irrigation purposes.

JUAREZ.—This city has furnished the State Government with data regarding installation of water-works and it is reported that latter will take steps to aid in the work.

SAN LUIS POTOSI.—A commission of engineers has been appointed by the city council to prepare the plans and estimates for water-works and sewers. The plans and estimates will be submitted to the state government for approval.

SEWERAGE.

CITY OF MEXICO.—Contrary to what is generally believed the sewerage of the City of Mexico is still uncompleted, and a company has applied to the direction of public works offering to contract for the completion of the work, which is of considerable magnitude. It is probable that an open call for bids will be made.

MANUFACTURING PLANTS.

CITY OF MEXICO.—Crown Cork & Seal Co., Harvey Coale, Secy., Baltimore, Md., may establish a factory near this city.

CITY OF MEXICO.—Several of the picture and picture frame manufacturers of this city have combined and have organized a new company with $150,000 capital. A new factory building has been secured, and it will be run by electric power. H. W. McVicar, one of the parties interested, left for the U. S. Nov. 15 to purchase machinery.

READERS' WANTS

This Department contains special requests, and detailed items, from persons in the market for supplies, and from others asking for the names and addresses of firms manufacturing certain tools, machinery and supplies required for work in which they are interested. ENGINEERING NEWS will be glad to furnish at once, free of cost, names and addresses of firms making the machinery or material desired, after which the item will appear in this column, **UNLESS OTHERWISE REQUESTED**, which request will be honored absolutely. The information **in all cases will be sent to our advertisers** handling the material wanted, or to other firms should it be out of the line of our advertisers. Every day we are receiving such requests with the understanding that it must not appear in the paper.

CURB BOXES.—Atlanta, Ga.—Blair & Co., 716 Prudential Bldg., are in the market for cast-iron curb boxes.

COAL MINING MACHINERY.—Reading, Pa.—Paul B. Davis, Asst. Cy. Engr. writes us that he is in the market for soft-coal mining machinery.

PIPE MILLS.—Portland, Ore.—The Oregon Iron & Steel Co., 339 Sherlock Bldg., A. S. Pattullo, Secy., desires to correspond with leading merchant pipe mills in the East.

HARD RUBBER PIPE AND STOP COCKS.—Reading, Pa.—Emil L. Nuebling, Supt. & Engr., Department of Water, desires to communicate with firms manufacturing the above.

RAILWAY SLEEPERS.—St. Petersburg, Russia.—Edw. C. Wittig, W. O. 4th Line 19 Qu. 4, writes us that he is interested in railway sleepers of hydraulic pressed fiber wood, such as are used by the Panama R. R. Co.

BOON DREDGING.—Kenton, O.—J. W. Gilmore, Surveyor, would like to hear from contractors familiar with boon dredging. He states that there will be about $23,000 worth of dredging for sale some time near Dec. 1.

ELECTRICAL SUPPLIES.—Romulus, Okla.—J. Robert Burnham, C. E., Box 34, writes for the names and addresses of firms manufacturing general electric and telephone supplies, as he is thinking of going into that business.

CITY OF MEXICO.—The management of the International R. R., has been in correspondence with capitalists of the U. S., for establishment of salt works to operate salt wells already dug on the line of the International R. R. Wells are located along the branch from Hornos to San Dedro and they carry a high percentage of salt.

MAGDALENA, SONORA.—The Mexican Government has granted a concession to P. Sandoval and associates to utilize about 20,000 acres of government land in this district. It is understood that the concessionaires will establish lumber mills for the purpose of working up the timber on the tract.

MONTEREY.—The machines, invented by A. M. Clamon, for cleaning ixtle fiber are to be manufactured here on a large scale.

MISCELLANEOUS.

CONCENTRATING PLANT.—City of Mexico.—A concentrating plant is to be installed at the Naranjera mine of the Mazaoil Copper Co.

DIKE.—City of Mexico.—Department of Public Works has ordered the construction of a large dike along the side of Lake Texcoco to prevent it overflowing.

DRAINING MINES.—Guanajuato.—E. L. Dwyer, of London, England, has been investigating the mining situation here with the view, it is said, of organizing a company to drain several rich mines in this district.

MINING MILL.—Parral.—A new mill will be built early in the coming year on the Candelaria mine of the Mexican Standard Mining Co. John Bonham, Mgr.

TUNNEL.—Santa Eulalia, Chihuahua.—Engineers of the American Smelting & Refining Co. are said to have recommended that a tunnel 1½ miles long be constructed by that company in this mining camp to run from the 1,250-ft. level of the Santo Domingo mine to the Velardena mine. The proposed tunnel will have a maximum depth of about 1,500 ft.

SMELTER.—Santa Rosalia, Chihuahua.—State government of Chihuahua has granted a concession for a smelter, of not less than 25 tons daily capacity, at Santa Rosalia, to Juan A. Creel, Joaquin Cortazar, Jr., Lorenzo J. Arellano and Juan Treviño, and they are authorized to transfer their rights to The Encinillas Mines, Ltd., Paul Ginter, Gen. Mgr. The Encinillas company has a plant already of about 80 tons daily capacity, and is stated to have been provided with $200,000, gold, by the stockholders to increase the capacity to 300 tons daily capacity.

MINING DEVELOPMENT. — Monterey. — Montezuma Mining Co. of Washington, D. C., and the Hidalgo Mining Co. of the same city, have been organized with Gen. Mathew C. Butler, Washington, as Pres. of the former company and Charles Hedges of Washington, as the secretary. The capital is $1,000,000, gold. Work on the property of the Hidalgo company will be actively prosecuted under management of Gen. Frank C. Armstrong, Washington, D. C. Property of the Montezuma Company is in state of Zacatecas. The Hidalgo company owns 60 claims on the Colorado mountain, 65 miles northwest of Parral.

$4.65; 3,622 ft. 24-in. brick drain, $3.50; 1,269 [illegible] 20-in. terra-cotta sewer, $1.75; manholes, $45 each.

*BRICK PAVING.—Webb City, Mo.—J. W. Be[illegible] Cy Engr., writes that at opening of proposals [illegible] for about 18,274 sq. yds. brick paving, A. F. Fra[illegible]sonville, Ill., offered estimate of $1.85 per sq. [illegible] The guarantee was for five years and pavement w[illegible] be laid on 6-in. concrete and 4-in. sand foundation. The work is to be readvertised and contract let in [illegible]ber. W. E. Smith is Cy. Engr.

*WALL LOCKERS.—Prescott, Ariz.—Follow[illegible] bids were received by Chas. C. Walcutt, Jr., C. Q. M., [illegible] Nov. 16 for furnishing wall lockers: Mauritz [illegible] using New Mexico white pine, Plan A—Single [illegible] $26.80 each, double lockers, $45 each; plan [illegible] lockers, $21.80 each, double lockers, $36, tr[illegible] quad., $62. Willer Mfg. Co., Milwaukee, Wis., [illegible] low pine or cypress, Plan A—Single,, $19.75 [illegible] $39.50.

FIRE HOSE.—Washington, D. C.—Following [illegible] were received Nov. 15 by District Commissioners for [illegible] ing 8,000 ft. or more of fire hose: Fabrick F[illegible] Co., New York, Keystone brand, 90 cts. per ft. [illegible] Fire Hose Co., of New Jersey, New York, Parag[illegible] 90 cts. Gutta Percha & Rubber Mfg. Co., New York, Maltese brand, $1.

SEWER SYSTEM.—Rocky Ford, Colo.—Following bids were received by Robert M. Pollock, Mayor, Oct. [illegible] for constructing sewer system:

BIDS RECEIVED AT ROCKY FORD, COLO., OCTOBER 24, 1904, FOR CONSTRUCTING SEWER SYSTEM.

Name.	38,791 ft. 8-in. Sewer Pipe, Laid.	1,637 ft. 10-in. Sewer, laid inc. exca.	6,842 ft. 12-in. Pipe, Laid.	6-in Ys. on 8-in Sewer.	6-in. Ys. on 10-in. Sewer.	124 Man-holes.	24 Flushers.	17 cu. yds. Concrete, in place.	2,000 ft. B. M. left in work.	100 cu. yds. Shale.	50 cu. yds. Rock.	Total bid.
Piper Bros, Pueblo, Colo	.41½	.51	.62½	.36	.52	$37.00	$70.00	$4.50	$30.00	$1.00	$3.00	$…761
Scoville & Waker, Pueblo, Colo	.47	.57	.83	.90	1.60	41.92	84.18	5.10	26.00	.30	1.19	…4,565
C. I. Manners, Pueblo, Colo	.60	.73	1.00	1.25	1.75	65.00	125.00	7.00	25.00	1.50	3.00	…5,948
J. B. Ware, Pueblo, Colo	.57	.68	.78	.30	.36	48.60	91.00	6.67	18.00	.70	2.00	…8,739
Standard Const. Co., Pueblo, Colo	.43	.63	.73	.45	.63	40.00	85.00	8.00	34.00	.30	2.00	…1,159
O'Brian & Rhoades, Denver	.52½	.69½	.73½	.40	.65	34.00	65.00	12.50	30.00	.16	.16	…3,608
E. R. Joyce, Colo. Springs	.46	.49	.65	.75	.95	25.00	55.00	9.00	26.00	1.00	5.00	…9,923
D. J. Tirsway, Denver	.49	.65	.68	.40	.48	36.00	76.00	10.00	35.00	.05	.05	…2,245
Pueblo & Denver Const. Co., Denver	.56	.75	.95	.50	.95	36.00	80.00	8.50	25.00	.50	3.00	…8,041
Rocky Ford Brick & Tile Co	.68	.76	.99	.75	1.00	50.00	80.00	7.50	25.50	5.00	5.00	4…,303
Doyle & Schwartz, Colo. Springs	.53	.67	.75	.45	.65	40.00	65.00	10.00	25.00	.20	.20	34,678
Erwin Kester Co	.56	.72	.84	.60	.90	40.00	70.00	10.00	20.00	.20	.20	37,027
Gibbons, Hughes & Cramer, Denver	.50	.59	.70	.64	.96	47.00	70.00	7.00	24.00	.75	.95	…4,546

WATER DEVELPOMENT.—City of Mexico.—R. B. Gorsuch on behalf of the International R. R. Co. has applied for permission to erect the necessary works to utilize the waters of the Barroteran Arroyo, Coahuila, for railroad services.

CAMPECHE.—International Lumber & Development Co., which owns 280,000 acres of land in this state, has opened subscription books for sale of its stock. The company has a capital of $5,000,000, and its offices are in the Drexel Bldg., Philadelphia, Pa. C. M. McMahon is Secy. and Treas.

DEVELOPMENT WORK.—Chihuahua.—Reports from this place state that C. P. Daudet and associates, owning a number of valuable mines and concessions on Cedros Island on coast of Lower California, contemplate further development work. Already $100,000 have been expended.

DOCKS, ETC.—Frontera, Tabasco.—A concesson has been granted to Henry D. Bushnell to construct warehouses, dry docks and a shipyard at Frontera, state of Tabasco. Vessels for use on the Tabasco and Campeche Rivers will be built there. The concession calls for an expenditure of $100,000.

MINING MACHINERY.—City of Mexico.—Mining property in the El Chico, Pachuca, district has been acquired by E. D. & C. S. Bronson, of City of Mexico, and a company is to be formed soon to work it. Modern machinery and methods are to be used, a large quantity of ore being now ready for the mill.

TELEPHONE SYSTEM.—City of Mexico.—Action is expected soon on the new plans for the telephone system, which have not yet been approved. As soon as the authority is obtained from the government, the Mexican Telephone Co. will place orders for building the switchboard and begin the construction of the conduit system.

MINING DEVELOPMENT.—City of Mexico.—L. P. Goldstone, a mining engineer of London, England, is reported en route to City of Mexico to consult with Robert James, Engr., and Mgr. of the El Gallo Mining Co., of London, relative to plans for opening up and developing the El Gallo mine on Balsas River, state of Guerrero.

MINING MACHINERY.—Calera, Zacatecas.—The Calera Mining & Milling Co. has been organized in Philadelphia, Pa., with $300,000, gold, capital, to develop the La Inocencia mine, located about 12 miles east of this place. It is a gold mine, and it is proposed to erect a 20-stamp mill, and purchase any other machinery that may be necessary.

PLACER MINING MACHINERY.—Chihuahua.—Edward A. Horner, of Chicago, who has been promoting the company to exploit the Santo Domingo placers on the Conchos River, state of Chihuahua, is to visit the property with Benj. S. Revett, Mining Engr., Breckenridge, Colo., to determine the class of machinery to purchase to exploit the placers.

COAL LANDS, RAILROAD.—Sabinas, Coahuila.—Arturo Longega and associates have acquired about 25,000 acres of coal lands, near here. They will install a large amount of machinery for the immediate development of the property. It is stated that the coal is adapted to coking purposes and in order to utilize it to that end a number of coking furnaces will be established. A railroad is to be built to the coal field from Sabinas, a distance of 25 miles. Mr. Longega and associates are said to be prepared to expend not less than $100,000 in the development of the property.

WATER MAINS.—New York, N. Y.—Following bids were received by Commissioner Water Supply, Gas and Electricity Nov. 16 for furnishing, delivering and laying water mains in various streets in Boroughs of Manhattan and the Bronx; (1) Norton & Dalton, 27 West 140th St.; (2) Lloyd Collis, 13 Park Row; (3) Cunningham & Kearns Contracting Co., 431 East 91st St.; (4) Jno. Cornwell, 69 East 127th St.; (5) Wilton Contracting Co., Williamsbridge, N. Y.; (6) P. Goodman, 108 East 117th St.; (7) Burns & Rodgers, 1909 Amsterdam Ave.:

Bids Received at New York, N. Y., November 16, 1904, for Furnishing, Delivering and Laying Water Mains in Various Streets in Boroughs of Manhattan and the Bronx.

Items.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1,360 tons, pipe	$26.50	$28.00	$28.00	$24.50	$25.00	$31.00	$28.00
60 tons, specials	60.00	60.00	58.00	56.00	55.00	60.00	62.00
30 cu. yds. rock, without blasting	10.00	12.00	5.00	10.00	10.00	20.00	30.00
2,500 cu. yds. rock	.30	3.00	2.00	3.00	3.00	.38	.30
27,400 cu. yds. earth	.30	.25	.25	.30	.25	.38	.30
28,500 cu. yds. fill	.30	.25	.20	.15	.23	.38	.30
30 lin. ft. 20-in. pipe	.75	.75	.50	.60	.50	.90	.45
15,200 lin. ft. 12-in. pipe	.27	.40	.30	.30	.35	.27	.30
36,900 lin. ft. 6-in. pipe	.17	.20	.17	.20	.22	.11	.15
1—48 x 6-in. connection	300.00	250.00	300.00	350.00	250.00	500.00	260.00
1—36 x 12-in. "	225.00	250.00	250.00	350.00	250.00	300.00	250.00
5—36 x 6-in. "	200.00	225.00	140.00	300.00	200.00	300.00	180.00
1—20 x 12-in. "	175.00	175.00	170.00	220.00	200.00	300.00	200.00
1—20 x 6-in. "	100.00	135.00	100.00	200.00	125.00	300.00	150.00
24—12-in. stop cocks	75.00	85.00	80.00	88.00	85.00	80.00	65.00
113—6-in. " "	33.00	35.00	35.00	40.00	41.00	32.50	25.00
195 single nozzle hydrants	70.00	62.00	75.00	75.00	75.00	66.00	70.00
5 cu. yds. brick masonry	12.00	15.00	10.00	16.00	15.00	18.00	12.50
5 cu. yds. concrete masonry	10.00	7.50	5.00	6.00	7.00	8.00	7.50
1,660 sq. yds. asphalt pavement	4.00	4.00	4.00	5.00	4.00	4.00	4.00
70 sq. yds. granite "	2.00	3.00	2.00	1.50	1.00	2.00	.01
3,700 sq. yds. pave. and flag	.40	.40	.40	.50	.01	.75	.01
1,400 sq. yds. macadam	.40	.50	.40	.80	.01	.50	.01
2,000 lin. ft. curb and gutters	.10	.10	.10	.01	.01	.01	.01
110 lin. ft. boxing	5.00	6.00	5.00	5.00	4.00	5.00	.01
500 B. M. sheeting	30.00	30.00	30.00	20.00	.01	40.00	.01
Totals	$98,733	$107,385	$101,988	$105,305	$102,622	$111,893	$96,345

CONTRACT PRICES.

WATER PIPE.—Spokane, Wash.—Bids were opened by Board Public Works Oct. 31 for furnishing between 5,000 and 6,000 ft. of 12-in. water pipe. Crane Co., Portland, Ore., offered a bid of $41 per ton for cast-iron pipe and Holley, Mason & Marks bid $1.45 per foot for Kalamein pipe.

BRICK DRAINS.—Jacksonville, Fla.—Contract was let by City Council Nov. 7 to J. E. Bryan & Co. for building brick drains and sewers at the following figures: 428 ft. 36-in. brick drain, $4.99 per ft.; 236 ft. 30-in. brick drain,

TUNNEL.—Boston, Mass.—The following bids were received by the Boston Transit Commission Nov. 17 for constructing Sec. 2 of the Washington St. tunnel; (1) Jas. J. Coughlan, 19 Worthington St., Boston; (2) Gow & Palmer, 50 Congress St., Boston; (3) Chas. F. Taylor & Co., 23 Lewis St., Boston; (4) E. W. Everson & Co., Boston; (5) Manufacturers' Contracting Co., 1005 Market St., Wilmington, Del.; (6) Jones & Meehan, 1 Beacon St., Boston; (7) Coleman Bros., 15 Court Sq., Boston; (8) H. P. Nawn, 82 Savin St., Boston; (9) Patrick McGovern, 6 Beacon St., Boston (awarded contract):

BIDS RECEIVED AT BOSTON, MASS., NOVEMBER 17, 1904, FOR CONSTRUCTION OF SECTION 2 OF THE WASHINGTON STREET TUNNEL.

Items.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
20,000 cu. yds. earth excavation	$4.90	$4.50	$4.00	$3.70	$4.42	$3.90	$3.80	$3.00	$2.95
3,500 cu. yds. concrete for all purposes except for roof	11.50	11.00	11.00	9.00	9.50	9.00	9.50	8.50	10.00
1,000 cu. yds. of concrete for roof	12.50	12.50	12.00	10.00	10.25	11.00	9.50	13.00	9.50
50 cu. yds. brick masonry for manholes, piers for water pipes, etc	17.00	18.00	16.00	20.00	16.00	20.00	20.00	15.00	15.00
Laying 100 lin. ft. 24-in. vitrified pipe	1.50	.50	2.00	3.00	1.00	2.00	1.50	.30	1.00
Laying 100 lin. ft. 18-in. and 15-in. vitrified pipe	1.75	.50	1.50	2.00	1.00	1.50	1.00	.30	1.00
Laying 70 lin. ft. 10-in. vitrified pipe	1.50	.40	1.00	1.00	.80	1.20	1.00	.25	1.00
Laying 30 lin. ft. 8-in. vitrified pipe	1.25	.40	.50	1.00	.50	1.00	1.00	.25	.50
Laying 120 lin. ft. 6-in. vitrified pipe	1.25	.30	.50	1.00	.30	.90	.50	.25	.25
Laying 230 lin. ft. 4-in. vitrified pipe	1.00	.20	.30	.50	.20	.80	.50	.10	.15
Setting and securing 20 tons steel weighing less than 6 lbs. per lin. ft	16.00	10.00	15.00	20.00	10.00	10.00	15.00	6.00	12.00
Setting and securing 435 tons steel weighing 6 lbs. or more per lin. ft	14.00	15.00	15.00	15.00	15.00	12.00	8.00	15.00	5.00
2,000 sq. yds. coating of Portland cement mortar	.30	.50	.75	.50	.45	.40	.50	.60	.35
10 cu. yds. of grout	20.00	25.00	20.00	30.00	25.00	25.00	30.00	25.00	20.00
6,000 sq. yds. waterproof coating of asphalt	.40	.50	.40	.50	.40	.40	.30	.30	.25
10,000 sq. yds. tarred felt	.25	.20	.30	.20	.20	.20	.15	.20	.15
Underpinning and supporting and protecting buildings, etc	6,000.00	10,000.00	5,000.00	20,000.00	5,175.00	8,000.00	8,000.00	5,000.00	4,000.00
Totals	$170,557	$165,097	$150,789	$150,560	$150,503	$141,126	$136,655	$120,533	$114,[illegible]

WATER PIPE.—Washington, D. C.—Bids were received Nov. 12 by District Commissioner as follows for furnishing 70 tons 8-in. cast-iron water pipe: Lynchburg Foundry Co., Lynchburg, Va., $24.20 a ton; M. J. Drummond & Co., New York, $24.40 a ton; U. S. Cast-Iron Pipe & Foundry Co., Philadelphia, Pa., $25.30; Camden Iron Works, Philadelphia, Pa., $26.50.

FOREIGN CONTRACTS—EXPORT NEWS.

GAS WORKS.—England.—Corporation of Darlington is considering expenditure of $250,000 for extending the gas works.

DREDGING.—Sweden.—Bids are asked by the Harbor Commissioners, Lulea, Sweden, until April 1, 1905, for proposed widening of Channel Tjufholssundet at Lulea.

TRAMWAY.—Chili.—A decree has been published in the official gazette authorizing municipality of Peñaflor to grant a concession for the establishment of a tramway to be worked by animal or steam traction.

RAILWAY.—Spain.—Madrid advices state that concession has been granted to the Steam Tramway Co. from Onda to el Grao de Castellon de la Plana, for the construction of a narrow gage railway from Villarreal to el Grao de Burriana.

POWER DEVELOPMENT.—Spain.—Don Modesto Chillida has been authorized to appropriate for industrial purposes 2,000 liters of water per second from the River Pusa, at El Mazo in Navalmorales (Toledo), according to a decree published in the "Gaceta de Madrid," of Oct. 31.

MANUFACTURE OF MATCHES.—Venezuela.—Louis Goldschmidt, U. S. Consul at La Guaira, Venezuela, reports that a contract has lately been made between the Government and Manuel V. Fejera, a Venezuelan citizen, for the exclusive manufacture of matches in that country.

IRON MINES.—Spain.—The Credita Minero has been formed at Madrid to exploit the pyrite iron and copper mine "Gloria in excelsis Deo," in the district of Zallamea la Real (Huelva). The capital is $96,500. Baron de Petrès has been nominated President and Don Constantino Lluch y Thomas, Manager.

TELEPHONE MATERIAL.—Australia.—Bids are asked by Deputy Postmaster-General Perth, Western Australia, until Dec. 28 for supply of following telephone material for that state: 19½ miles 26 pair lead-covered cable, dry core, to standard specification No. 7; 5,000 paper sleeves, 3 ins. long by 3-16-ins. diameter; 350 yds. paper strips, 2 ins. wide.

TRAMWAY EXTENSION.—England.—Town Council of Croydon has adopted report of tramways committee recommending extension of tramways. The total cost of the improvement is $900,000, divided up as follows: Tracks, $350,000; electric equipment, $125,000; enlargements and new depot, $100,000; 40 cars, $150,000; contingencies, $50,000; street improvement, $125,000.

MINING.—Spain.—A limited company has been formed with a capital of $140,000 and headquarters at Bilbao, for working the blende and calamine mine, Santa Maria y Dos Hermanas, situated in Rinoba (Santander). The Board of Directors is formed of Don Silvestre Ajuria, Pres.; D. Jonge Tolack, Don Gustavo Teses Cuevas, Don Alberto Dandy, Don Cesar Campo and Don Julio Bonnet.

WATER SUPPLY, SANITARIUM, CANAL.—Chili.—Budget Commission of Government has approved the expenditure of about $230,250 for improvement of water supply of various towns. The Commission has also approved expenditure of about $75,000 for erection of sanitarium for treatment of tuberculosis, and the expenditure of about $1,900 on a study of the best means of piercing the Isthmus of Ofqui, with a view to improving navigation between Valdiva and Punta Arenas.

DREDGING, RAILWAY WORK.—French West Africa.—The Governon-General of French West Africa has placed before the Committee of Public Works in the Colonies a scheme for improving the Senegal, so that it would be navigable for ten months in the year, as far as Tamboukane, by vessels drawing about 6½ ft. He also suggests that the railway from Kayes to the Niger should be extended to Tamboukane. The cost of the projected works, which would involve the construction of six barrages, is estimated at about $3,000,000. At the same time steps would be taken to irrigate the greater portion of the lands in the neighborhood of the river.

RAILWAY BRIDGE.—India.—The Bengal Chamber of Commerce has revived the project for the Bankura-Calcutta Chord Ry., which proposes the connection of Northwest Provinces with Calcutta. According to a report made in 1901 on this project the total length of the chord would be 99.31 miles and the cost would be about $5,897,391 for a single track line and about $8,626,695 for a double track line. If a bridge is to be constructed over the Hooghly River, as is favored by the Chamber of Commerce, the cost will be greatly increased. The cost of constructing a bridge with approaches, 5.92 miles long, at Cossipon has been estimated at about $3,628,900; for a bridge located at Panihati, the cost was estimated at about $2,723,500.

RAILWAYS.—Chili.—A decree was published in the "Diario Oficial," of Sept. 22, authorizing expenditure of about $56,250 for the carrying out of surveys for a railway from Arica to La Paz, for a study of the best means of irrigating the Province of Tacua, and for other expenses with a view to furthering the industrial development of that province. Decrees have also been published authorizing Don Miguel Carreno Gomez to construct a railway from El Salar Grande de Tarapaca to Huanillos; authorizing the Compania Esplotadora de Lota y Coronel to construct and work a railway from Playa Negra to the Bay of Coronel; authorizing Don Jose Campelo to construct and work a railway joining the port of Tirua with Lumaco, Traignen and Victoria.

RAILWAYS.—Argentina.—Decrees have been published authorizing the Executive Government to carry out the following surveys: For the construction of a railway from Villa Dolores, Department of San Javier, Province of Córdoba, passing through Nono, El Transito, Salsacate, San Carlos and La Higuera, or the immediate neighborhood thereof, and joining the Northern Ry. of Argentina at Soto station; for the extension of the existing railway from Chumbicha to Catamarca as far as Pomancilla; for the construction of a railway from the port of Goya, in the Province of Corrientes, to San Miguel, passing through Concepción, and forming a junction with the North Western Ry. of Argentina at the point which is judged to be most convenient. A decree has also been published granting Señores Casimiro De Bruy and Rómulo Otamendi the right to construct and work narrow gage railways between Buenos Ayres and the port of Rosario and Marco Paz and General Villegas, with one branch line from the former, and two branch lines from the latter railway.

RAILWAYS.—China.—According to an article in the Chicago "Record-Herald" there is to be a large amount of railway building in this country during the next 25 years. Many roads are proposed and the government has already granted concessions for the following lines: Shanghai to Nanking (English), Hongkong to Canton (English), Ningpo to Hankchow (English), Soochow to Hwai-An (English), Tonking to Yunan (French), Tsinan-fu to Kaifung-fu (German). One of the most important of these has been undertaken by an English syndicate, which proposes to girdle that prosperous section around Shanghai with a series of connecting roads that will give each of nine important cities transportation facilities to the Shanghai markets. Surveys have been made and necessary capital is stated to have been secured, but nothing has been done so far in the way of construction. Another proposed English enterprise is intended to connect Hankow with several important cities north and south of the Yangtse River, all of which offer favorable prospects. These roads would reach mineral deposits of great value, particularly iron, anthracite and bituminous coal, copper and tin. Still another English proposition is to connect Canton with Cheng-tu, the capital of Sezchuen province, and the head of navigation on the Yangtse River. It is also planned to extend the Burma Government Railway across the border to Cheng-tu in China, and the road has already been constructed as far as the boundary line between Burma and Sezchuen Provinces. Surveys have been under way to locate the line on the China side of the border, but were stopped last winter by the British authorities in Burma. The French Government is behind several syndicates which have obtained or are seeking concessions for the construction of railways northward from Tonquin, the French possession in China, into the populous southern provinces and toward the Yangtse Valley. Along the lines of these proposed roads are supposed to be valuable beds of coal and mineral deposits, as well as a productive agricultural country.

RAILWAYS.—Spain.—An agreement was reached between France and Spain in 1885 for building two new railroads through the Pyrenees and negotiations are now in progress to bring this agreement into effect. As originally suggested, one of these lines, starting from Oloron, in the Department of the Basses-Pyrenees, France, would pass through the valley of the Aspe, by Canfranc, to the town of Jaca, in Aragon, Spain, and the other was to start from the little French town of St. Girons, in the Department of Ariége, cross the frontier, by the mountain passes of Salau and Sort, and join the existing network of Spanish railroads at Lerida. A third line has been proposed by the French Government and Spain has returned a favorable answer to the project. This line would start at Ax-les-Thermes, in the Department of Ariége, and crossing the high lying plateaux of the Cerdana, would enter Spain at Puigcerdá and terminate at Ripoll, where a junction would be made with the present railway line from Barcelona. The international committee is said to favor the construction of this latter road forthwith. As soon as this line has been completed the old projected route by way of Canfranc will be taken up. On either side of the frontier the necessary plans have been prepared, so that all is ready for the contractors. On the Spanish side the railway system already reaches to within a short distance of the mountains that will have to be tunneled in order to effect the junction of the French and Spanish lines. At the last session of the Cortes a law was passed relating to railways intended to complete and develop the existing systems and to open up districts hitherto unprovided with railway facilities. The total length of track authorized under this law is about 3,125 miles, which is to be divided into groups or systems of not less than about 125 miles each. The concessions for each of the various groups of railroads will be granted by the Government to the highest bidder at public "auctions," which will be held in due time, but the provincial councils, or other local authorities, will have the first right to these concessions, irrespective of any tenders, however advantageous, that might be received from private concerns, on condition that such local authorities take over entirely or in part the guaranty offered by the State.

WATER SUPPLY.—Ecuador.—Under date of Oct. 21, 1904, the Department of Public Works has called for bids for a complete system of works for supplying potable water to the city of Riobamba. The period when bids close is not specified. Plans can be seen at the Department of Public Works, Quito, Ecuador, and it is stipulated that bidders must make themselves acquainted with the ground. This appears to be important, judging from the summary of items comprised in the work, as given below. Bidders are required also to give a guarantee for proper execution of the contract, and to name the time of beginning and completing the work.

The work in question comprises an aqueduct leading water from a mountain spring to the city, and a distribution network within the city. These separate portions are, briefly, as follows:

Aqueduct, Upper Portion.—About 3,500 meters (11,400 ft.) long, with a total fall of 12 to 17 meters (0.34 to 0.48% grade) depending upon the final location as chosen by the contractor. To be built of rubble masonry laid in lime mortar. The aqueduct must be tight against infiltration and against loss of water. Its cross-section is to be determined by the contractor, and must be sufficient to have a capacity 20% greater than the flow of the spring. The latter is estimated, from measurements, to be 130 to 150 liters per second, but must be measured very accurately by the contractor preliminary to designing the aqueduct. The aqueduct is to be built in excavation, at a depth sufficient to secure it against landslides or torrents. In connection with this aqueduct there are to be built: (1) A covered rubble-masonry curbing for the spring. (2) A steel or masonry crossing (or crossings) over the Basocón Creek; in case the line departs from the hydraulic grade, a steel siphon must be used. At this point there is also to be a waterway for excess water. (3) A covered masonry reservoir, of 25 to 30 cu. m. capacity, at the lower end of the upper section of the aqueduct; near this reservoir will be located a second waterway.

Aqueduct, Lower Portion.—Steel pipe-line, about 12,500 meters (41,000 ft.) long horizontally, with a total vertical fall of 317 to 322 meters (1,040 to 1,056 ft.), depending upon the elevation determined on for the covered reservoir just noted. The location of this pipe-line is to be determined by the contractor; a preferred location, and two alternative locations, have been laid down by the Department and are marked on the plans (to be seen at the Department's offices). The pipe-line must be laid below the hydraulic grade-line throughout. The interior diameter of the pipe is to be not less than 6 ins. The pipe is to be of iron or soft steel low in carbon, sulphur and phosphorus, is to have bolted flange joints, is to be tested at the factory to 400 to 500 lbs. pressure, and is to be coated with asphalt inside and out. The pipe-line must be laid in a trench at a depth not less than 20 ins. below ground, backfilled and tamped. Will be tested after laying under full static head. In connection with the pipe-line are required: (1) A small steel or masonry equalizing reservoir at a specified point on the line; this reservoir must be located exactly in the mean hydraulic grade of the pipe-line and should have 10 to 12 cu. m. capacity. (2) Air-vent valves at all summits. (3) At least six drain valves, and a 6-in. stop valve at each. (4) A steel or masonry bridge or inverted siphon crossing over a creek. (5) A steel or masonry bridge crossing over Basacón Creek.

Receiving Reservoir and Distributing System.—The receiving reservoir at the lower end of the pipe-line is to have at least 500 cu. m. capacity. To be preferably of steel plate construction, of ¼-in. minimum thickness. To be provided with drain pipes and valves. The distribution system from the reservoir through the city is to be of cast-iron pipe; a main of 8 ins. (inside) diameter and branches of 3 ins. diameter with lead joints, and the necessary valves and fittings as per plan; 36 drinking fountains may be required to be furnished.

The contract will be awarded to the lowest bidder, and must be signed and the stipulated guarantee delivered within five days after notification of award is received. All bids may be rejected.

INDUSTRIAL NOTES.

OUR READERS are requested to send short notes regarding new contracts that they are about to award, or have secured, for our news columns. Changes in firms' names and addresses are also wanted. "Write-ups" will not be inserted under any circumstances, as notes must contain news of interest to our readers. If our readers are in the market for any kind of machinery, tools, etc., we shall be glad to send them names of responsible firms making what they want.

STUPP BROS. BRIDGE & IRON CO., St. Louis, Mo., announces the removal of its plant to new location on Weber Road and Missouri Pacific Railway, at Carondelet.

CHARLES HENRY DAVIS & CO., 25 Broad St., New York, announces the dissolution of the firm Nov. 1, 1904. The business hereafter will be conducted by the Good Roads Machinery Co. and the American Road Machine Co., 136 Liberty St. Nat. Tyler, Jr., Mgr.

THE AMERICAN WATER SOFTENER CO., of Philadelphia, Pa., has moved into more commodious offices and combined the laboratory with the general sales department. It now occupies a suite of offices in the Mutual Life Bldg., 1011 Chestnut St., Philadelphia.

THE KNAPP BROS. CO., 123 Franklin St., Chicago, announces that it will carry on the business of Knapp Bros., dealers in and contractors for steel fireproof partitions, builders' sheet metal goods and reinforced concrete work. The copartnership of Knapp Bros. has been dissolved.

THE F. D. CUMMER & SON CO., Cleveland, O., has furnished the McCarthy Improvement Co., Contractors, of Davenport, Ia., with a portable railway asphalt paving plant, and the latter company states that it is can lay 1,800 to 2,000 sq. yds. of 2-in. topping per day, and almost double that quantity of binder.

THE CHICAGO PNEUMATIC TOOL CO., of Chicago, informs us that Mr. J. W. Duntley, President, has sailed for another business trip in Europe to introduce the new Duntley electric drill. The company's foreign and domestic sales in October were nearly double those of any month for the past two years.

FRANCIS JONES & CO., of Atlanta, Ga., announce that the business has been incorporated under the name of the Georgia Granite Co. and will be conducted under that name in the future. New quarries have just been opened at Lithonia, Ga. The officers of the Georgia Granite Co. are W. H. Patterson, Pres.; W. H. Patterson, Jr., Vice-Pres. and Gen. Mgr., and Francis Jones, Gen. Supt.

THE NORTHERN ELECTRICAL MFG. CO., of Madison, Wis., has its motors applied to about 43 machine tools in different exhibits at the St. Louis Exhibition. There are 25 variable-speed motors and 13 constant-speed motors, the others are not specified. Of 19 motors in which the method of driving is specified, 8 have a chain drive, 6 have gearing, 4 are direct coupled and 1 has a belt drive to the machine.

THE LAWRENCE PUMP & ENGINE CO., Lawrence, Mass., has been organized and will engage in the manufacture of a complete line of improved centrifugal pumps and vertical steam engines. Mr. H. L. Mellor, who is associated with the company as manager, has had extensive experience in this line of work, having been superintendent and engineer of the Lawrence Machine Co. for many years, the product of that company having been developed under his direction and built largely from his designs.

THE AMERICAN CEMENT CO., Pennsylvania Bldg., 15th and Chestnut Sts., Philadelphia, Pa., has been awarded the first contract for the cement for the Panama Canal, the amount being 10,000 barrels. The bid was made in the name of its New York selling agency, The United Building Material Co., Park Row Bldg., New York City, and the award was made last Saturday. The American Cement Co. has secured for their "Giant" Portland Cement some of the most important engineering works in the world, including 1,500,000 barrels for the New York Subway.

THE WELLMAN-SEAVER-MORGAN CO., Cleveland, O., was recently awarded a contract to construct two coal-handling machines for the Boston Coal Dock & Wharf Co., Duluth, Minn. This is one of the docks under the management of the St. Paul & Western Coal Co., of which Mr. M. J. Patton is superintendent. The machines will consist of two conveyor bridges, each about 350 ft. long, including front and rear cantilevers. The machines will be designed so that coal may be screened and loaded into boxcars as well as unloaded from vessels and will be built to be operated by steam. They will be equipped with 2-ton Hulett patent excavating buckets and machinery designed to give maximum speeds of operation. The structural work will be of steel throughout and the machines will be self-propelling along the dock.

HENRY A. HITNER'S SONS, of Philadelphia, Pa., advise us through their Brooklyn office, 19 Water St., that they have recently closed a contract with Brooklyn Rapid Transit Co. for the removal of about two miles of elevated railroad, from which they will have a large tonnage of angle-iron, I-beams, channels, plate and lattice girders, box and lattice columns of various sizes and dimensions, water towers, tanks, etc. They will shortly issue a descriptive pamphlet covering not only this material, but calling attention as well to their stock of I-beams, channels, pipe and machinery, which they have constantly on hand for quick shipment. They make a specialty of dismantling viaducts, bridges and structures of all kinds, recently having purchased from the U. S. Government the monitors "Nahant" and "Jason," also the British battleship "Hotspur." Their plant, which is modern, covers about four acres and is equipped with a 25-ton electrical traveling crane running the full length of the plant, electrical lifting appliances for lifting the lightest to the heaviest piece of iron or steel, and compressed air cutters. Among their many pairs of shears is one of the largest type ever built. The company have their own machine and boiler shop and electric plant, furnishing power and light.

CANAL IMPROVEMENT.

Albany, N. Y.

State of New York, Office of Superintendent of Public Works, Albany, November 17, 1904.—Notice to Contractors.

Sealed proposals will be received by the undersigned at his office in the Capitol, in Albany, N. Y., for improving the New York State canals pursuant to the provisions of chapter 147 of the Laws of 1903, as follows:

On contract No. 1, Champlain canal, River Line, and on contract No. 2, Erie canal, section 1, until twelve o'clock noon of Thursday, December 15th, 1904, at which place and hour they will be publicly opened and read; and

On contract No. 3, Champlain canal, Land Line, and on contract No. 4, Erie canal, section 5, until twelve o'clock noon of Friday, December 16th, 1904, at which place and hour they will be publicly opened and read; and

On contract No. 5, Erie canal, section 7, and on contract No. 6, Erie canal, section 9, until twelve o'clock noon of Saturday, December 17th, 1904, at which place and hour they will be publicly opened and read.

The work referred to above is described as follows:

Contract No. 1, Champlain Canal, River Line.

For excavating the river channel from Northumberland to Fort Miller, and from Crocker's Reef to Fort Edward, the construction of Crocker's Reef dam, the approaches to the head and foot of "The Land Line," and other incidental work. Sta. 9 + 52 to 147 + 75, and Sta. 262 to 497 + 35, length = 7,075 miles.

Contract No. 2, Erie Canal, Section 1.

The excavation and protection of the sides of the canal from the Mohawk river to a point about one-fourth of a mile west of the head of lock No. 3, the construction of locks Nos. 2 and 3, with the approaches and appertaining parts.

Contract No. 3, Champlain Canal, Land Line.

For the excavation of the canal and the protection of its banks from Sta. 147 + 75, below Fort Miller lock (No. 6), to Sta. 262 + 00, above the guard gate at Crocker's Reef; the construction of the Fort Miller lock (No. 6) and its approaches, the guard gate and its approaches, the bridge abutments and foundations at Sta. 151 + 60, Sta. 173 + 18, Sta. 213 + 46, and Sta. 247 + 50; the removal and re-erection of the present bridge at East street; the change in location of the old Champlain canal, and all other incidental work.

Contract No. 4, Erie Canal, Section 5.

For the construction of the canal and its appurtenances from foot of lock 25 (Sta. 6715 +), to deep water, east end of Oneida Lake at Sylvan Beach (Sta. 6790). Length = 4.83 miles.

Contract No. 5, Erie Canal, Section 7.

For the construction of the canal and its appurtenances from Sta. 5074, near Mosquito Point Bridge over the Seneca river to Sta. 5373, east of the village of Savannah. Length, = 5.66 miles.

Contract No. 6, Erie Canal, Section 9.

For the excavation of the canal from Sta. 2571, just south of Buffalo Road, west of Rochester, to Sta. 2744, near South Greece, and the protection of its banks; the construction of foundations and abutments for bridges at Buffalo Road, Lyell Avenue, Niagara Falls Branch of N. Y. C. & H. R. R., Lee Road and Spier's Bridge Road, and incidental work, as shown on plans.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works, at Albany, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; and at the offices of the Assistant Superintendent of Public Works for the Western Division, at Rochester, and Buffalo, N. Y. Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment of cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per centum) of the work done at the contract price or materials furnished at a relative price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the State, and payable at sight to the Superintendent of Public Works for five per centum (5 per centum) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal. Upon execution of the contract and approval of bonds, the deposit will be returned to the proposer. The deposits of persons other than the one to whom the award of contract shall be made will be returned immediately after the award has been made. The amount of bond required for faithful performance will be twenty-five per centum (25 per centum) of the amount of the estimated cost of the work according to the contract price, and an additional bond, known as labor bond, in the sum of thirty-five per centum (35 per centum) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

Proposers are requested to bid a lump sum for which the entire work upon a given section will be completed pursuant to the plans and specifications, and also unit prices for which the various kinds of work will be done, separate proposal forms for each class being furnished; the State reserving the option of choosing as between the two forms of proposal.

Each proposal must be addressed: To the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made. Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. The right is reserved to reject all proposals and readvertise and award the contracts in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

CHARLES S. BOYD,
21-4t Superintendent of Public Works.

NOTICE TO CONTRACTORS.—City of Manila.—Office of the Municipal Board, Manila, P. I., June 10, 1904.—Sealed proposals will be received at this office until 12 o'clock noon of the first day of December, 1904, for the construction of the superstructure for a Bridge over the Pasig River, in the City of Manila, in accordance with the plans on file at the office of the City Engineer. Bids will be received (1st) for the delivery and erection of the structure complete in every respect and ready for use; (2d) for the delivery at the wharf in Manila, free from all encumbrances, all the structural material of every sort, ready for the erection of the bridge complete. Each bid shall be accompanied by (1st) a stress sheet showing the maximum live and dead load stresses in each member, together with the gross and net sections and the material of which each member is to be composed; (2d) a certified check, payable to the City of Manila, in the sum of five thousand ($5,000) dollars United States currency, as a guaranty that the contractor will within ten (10) days from the awarding of the contract enter into contract with the City of Manila for the faithful performance of all the work above specified. A bond of ten (10%) per cent. of the accepted bid will be required for the faithful performance and completion of the contract within a period of fifteen months from the date of signing the contract. Printed forms for bids, plans and all necessary information may be obtained at the office of the City Engineer, Manila, P. I.; Engineering News Publishing Co., 220 Broadway, New York City, and the Bureau of Insular Affairs, Washington, D. C. The right is reserved by the City of Manila to reject any or all bids and to waive any defects. By direction of the Board. JNO. M. TUTHER, Secretary. 5-9teow

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DEPARTMENT OF THE INTERIOR, United States Geological Survey, Reclamation Service, Washington, D. C., November 22, 1904.—Sealed proposals will be received at the office of the United States Reclamation Service, Phoenix, Arizona, until 9 o'clock a. m., January 5, 1905, for the delivery of 50,000 barrels, more or less, of fuel oil at Mesa or Roosevelt, Arizona, and for the hauling of miscellaneous freight. Specifications and forms of proposal may be obtained from Louis C. Hill, Engineer, United States Geological Survey, Phoenix, Arizona, or from the Chief Engineer, United States Geological Survey, Washington, D. C. Each bid must be accompanied by a certified check for $1,000, payable to the order of the Secretary of the Interior, as a guaranty that the bidder will, if successful, promptly execute a satisfactory contract and furnish bond in the sum of $20,000 for the delivery of the oil and the hauling. The right is reserved to reject any and all bids, to accept one part and reject the other, and to waive technical defects, as the interests of the service may require. Bidders are invited to be present. Proposals must be marked, "Proposals for the Delivery of Oil for the Salt River Project, Arizona." THOS. RYAN, Acting Secretary. 21-5t

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TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., November 16th, 1904.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 21st day of December, 1904, and then opened, for the construction complete of the U. S. Post Office at Gainesville, Florida, in accordance with the drawings and specifications, copies of which may be had at this office or at the office of the postmaster at Gainesville, Florida, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 21-2t

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PUMPING ENGINE, BOILERS, STOKERS, ETC.

Canton, O.

Sealed bids will be received by the Board of Public Service of the City of Canton, State of Ohio, at the office of said Board until twelve o'clock noon, December nineteenth, 1904, for furnishing the necessary labor and materials for One Vertical Triple Expansion Pumping Engine, having a capacity of twelve (12) million gallons in twenty-four (24) hours.

Sealed bids will be received at the same time and place for furnishing all the necessary labor and materials for three (3) boilers, capacity of two hundred (200) horse-power each.

Sealed bids will be received at the same time and place for furnishing all the necessary labor and materials for three (3) smokeless furnaces or stokers.

Sealed bids will be received at the same time and place for furnishing all the necessary labor and materials for two (2) twenty-inch and two (2) thirty-inch hydraulic operative valves. All bids to be according to plans and specifications on file in the office of the Board of Public Service, Water-Works Department.

Each bid must contain the full name of every person or company interested in the same, and be accompanied by a bond in the sum to be specified in the blank form attached to the specifications, to the satisfaction of the Board, or a certified check on some solvent bank of the City of Canton, Ohio, as a guarantee that if the bid is accepted, a contract will be entered into and its performance properly secured. Should any bid be rejected such check will be forthwith returned to the bidder, and should any bid be accepted such check will be returned upon the proper execution and securing of the contract.

Bidders are required to use the printed forms, which will be furnished on application.

The right is reserved to reject any and all bids.

By order of the Board of Public Service.

November 15, 1904.

C. A. ZELLERS,
LOUIS B. OHLIGER, Clerk.
Supt. of Water-Works. 21-2t

SEWERS, WATER PIPE AND APPURTENANCES.

Office of the Sewerage and Water Board, No. 602 Carondelet Street, New Orleans, La., Nov. 19, 1904.

Sealed proposals will be received until 12 o'clock noon of Tuesday, January 31, 1905, for the construction of 65 miles of sewers and appurtenances and the furnishing and laying of 15 miles of cast iron water mains and appurtenances, and 4,000 feet of railroad track.

The sewers will range in size from 8 to 30-inch, and in depth from 5 to 18 feet, and will include 700 manholes and 275 flush tanks.

The water pipe will be mainly from 16 to 48-inch in diameter, aggregating about 13,000 tons. Small quantities of 4 to 12-inch water pipe will also be included.

All quantities stated are approximate only.

The sewer work will be divided into four (4) contracts; there will be one contract for furnishing 48-inch cast-iron pipe and one for furnishing pipe smaller than 48-inch; also one contract for laying the 48-inch pipe and furnishing and laying the railroad tracks, and one contract for laying water pipe smaller than 48-inch.

A surety company bond for an amount equal to 25 per cent. of the gross amount of each contract will be required of the successful bidder in each case.

A certified check on a New Orleans bank for $1,500 must be deposited with the Secretary of the Sewerage and Water Board, not later than 11 A. M., January 31, 1905, by each bidder, and one for each contract bid upon.

After December 20, 1904, specifications, general plans and blank forms of proposals may be obtained at the office of the Board.

The right is reserved to reject all bids on either contract.

F. S. SHIELDS,
GEO. G. EARL, Secretary.
General Superintendent. 21-10t

WATER-WORKS.—Sealed proposals will be received up to 12 m., Thursday, December 15, 1904, for the complete construction of a water supply for the City of Jefferson, Texas. One 40,000-gallon steel tank and tower 60 feet high, 7,300 feet c.-i. mains, 14 hydrants, combined gasolene engine and pump capacity 15,000 gallons per hour, brick pump house and intake, will be required. Work to be done under rules of American Public Works Association. Certified check $500. Estimated cost $10,000. Plans can be seen at office of Edward J. O'Beirne, 418 Scimitar Bldg., Memphis, Tenn., and at Mayor's office, Jefferson, Texas. J. H. ROWELL, SR., Mayor. 21-1t

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WATER-WORKS.

[illegible]en, Miss.

Bids will be received unt[illegible]m. December 7, for materials and co[illegible]uction work for complete system of wate[illegible] with mechanical filter. Certified ch[illegible]r four (4) per cent. required.

The right is reserved to r[illegible]ny or all bids.

Plans on file at Mayor's o[illegible]

For details address A. L. [illegible]y, Engineer, Greenwood, Miss.

J. [illegible]CKER,
21-1t. Mayor.

DEPARTMENT OF THE IN[illegible]IOR, U. S. Geological Survey, Washingt[illegible] C., November 17, 1904.—Sealed prop[illegible] will be received at the office of the U[illegible]States Reclamation Service, at Hazen, [illegible]da, until two o'clock P. M., Decembe[illegible] 1904, for the construction of about 150 [illegible] of lateral irrigation ditches with headga[illegible]lls, weirs, and bridges, and for the C[illegible] River old channel canal, involving about [illegible],000 cubic yards of earthwork, for the [illegible]gation of lands in the vicinity of Leetv[illegible]d Fallon, in Carson Sink Valley, Nevada [illegible]ids will be received on excavation and em[illegible]kment and necessary structures for one [illegible]more divisions, which will approximate [illegible],000 cubic yards each. The right is rese[illegible] to award to one bidder as many or as [illegible] such divisions as the interest of the se[illegible]e may require. Specifications, forms of [illegible]oposal and plans may be inspected at the [illegible]fice of the chief engineer of the Reclam[illegible] Service, Washington, D. C., and at the office of the Reclamation Service, Hazen, Nevada. Each bid must be accompanied by a certified check for three per cent. of the amount of the bid, payable to the order of the Secretary of the Interior, as a guaranty that the bidder will, if successful, promptly execute a satisfactory contract and furnish bond in the sum of twenty per cent. of the contract price for the faithful performance of the work. The right is reserved to reject any or all bids, to accept one part and reject the other, and to waive technical defects as the interest of the service may require. Bidders are invited to be present. Proposals must be marked: "Proposals for Construction of Laterals, Truckee-Carson Project." THOS. RYAN, Acting Secretary. 21-3t

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TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., November 14, 1904.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 20th day of December, 1904, and then opened, for the low pressure steam heating apparatus complete in place, for the U. S. Post Office and Court House at Harrison, Arkansas, in accordance with drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Harrison, Arkansas, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 20-2t

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DEPARTMENT OF THE INTERIOR, U. S. Geological Survey, Washington, D. C., November 17, 1904.—Sealed proposals will be received at the office of the Chief Engineer of the Reclamation Service, U. S. Geological Survey, Washington, D. C., until 2 o'clock P. M., January 9, 1905, for the construction of an outlet tunnel about 125 square feet cross-section and about 500 feet long, and two vertical shafts, in solid granite, to serve as a diversion tunnel for the Pathfinder Dam about fifty miles southwest of Casper, Wyoming, on North Platte River. Forms of proposal, plans, and specifications may be seen at the office of the Chief Engineer, Washington, D. C., or at the office of the United States Reclamation Service, Chamber of Commerce Building, Denver, Colorado. Each bid must be accompanied by a certified check for $1,000, payable to the order of the Secretary of the Interior, as a guaranty that the bidder will, if successful, promptly execute a satisfactory contract and furnish bond in the sum of twenty per cent. of the contract price for the faithful performance of the work. The right is reserved to reject any or all bids, to accept one part and reject the other, and to waive technical defects as the interest of the service may require. Proposals must be marked "Proposals for Pathfinder Tunnel, North Platte Project." Bidders are invited to be present. THOS. RYAN, Acting Secretary. 21-6t

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SITUATIONS OPEN

WANTED.—Party about forty with practical experience, skilled in design, special and general machine construction and foundry practice; established company; one who can acquire very profitable interest. Address "Z. 21," Engineering News, New York. 21-1t

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